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Evaluating a Skills-Based Approach to Bullying Prevention

by

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DISSERTATION

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Abstract

In the following paper, I present an evaluation of the bullying prevention program designed and delivered by the John Howard Society of Waterloo-Wellington (JHS WW). A mixed-methods approach involving both quantitative and qualitative data collection was used to assess the program impacts on children receiving the primary stream of the program (Pre-Kindergarten through Grade 3), and the junior stream of the program (Grades 4 through 6). A case study was also conducted to assess the impacts of the program one year after program delivery and after two consecutive years of programming. Finally, all school staff members were invited to respond to a survey designed to assess their impressions of the program and its effectiveness. In total, 384 students from 6 schools (3 intervention, $n = 151$, and 3 comparison, $n = 197$), and 18 teachers from the intervention sites participated in the study. Findings from the evaluation indicate several significant positive outcomes, particularly with respect to various cognitive beliefs and rates of bullying. These impacts were particularly strong for youth receiving the junior stream of the program. Data analysis also revealed that while program impacts may attenuate over the long-term, providing a second year of programming reduced such attenuation, and resulted in even stronger positive changes than did only one year of programming. Qualitative data analysis indicates that knowledge acquisition based on program concepts was strong for youth in both levels of the programming. Further, data from school staff surveys support these positive findings. Strengths and limitations, program recommendations, and knowledge translation strategies are also discussed.

Summary of Results

As reports of bullying continue to make headlines, the push to find an effective prevention program remains as the focus of much research. While a number of programs are available, very few have been evaluated, and few evaluations have found support for the effectiveness of these existing programs. This study investigates an educational skills-based bullying prevention program designed and delivered by the John Howard Society of Waterloo-Wellington (JHS WW). Divided into two divisions (the primary division or stream which is delivered to children in Junior Kindergarten through Grade 3 and the junior division or stream which is delivered to children in Grade 4 through Grade 6), this program uses age-appropriate materials and techniques to help students learn how to effectively interact with one another, assertively stand up for themselves, and help others who are being bullied. The approach used by this bullying prevention program encompasses each of the components of effective prevention programs including being comprehensive, using varied teaching methods, having sufficient dosage, being driven by theory, nurturing positive relationships, being appropriately timed and socio-culturally relevant, and employing well-trained staff to deliver the program.

In developing the following document, I studied the current state of bullying, including prevalence and outcomes for both aggressors and targets, and describe some of the current theories used to explain bullying. I then assess some of the more commonly used prevention formats as well as the format used by the JHS WW. I then describe the evaluation of the JHS WW program as it pertains to several key research questions:

- 1) To what extent does the program affect the cognitive judgements students make of self and others with respect to bullying situations?
- 2) To what extent does the program impact overall rates of bullying?

- 3) To what extent does the program impact behavioural responses with respect to how students respond to bullying either as a bystander or a target of bullying?
- 4) To what extent does the program impact the degree to which students engage in or are the target of various aggressive behaviours?
- 5) What program concepts and skills do students remember following program delivery?
- 6) What are the long-term impacts of the program one year after students receive it?
- 7) What are the benefits of running the program in the same school two years in a row?
- 8) What are the overall impressions participants have of the program and what changes would they suggest making?

Both quantitative and qualitative assessments were used in this evaluation. Quantitative data were collected in order to assess changes in cognitive judgements students make and the behaviours they engage in both with respect to acting aggressively and intervening in bullying situations. Qualitative data provided a look at how well students retained and used the information and skills provided through the program and provided insight into overall experience with the program and areas for potential improvements. Staffs were also invited to provide feedback on their experience with and perceptions of the program.

In total, 384 students from 6 schools (3 intervention, $n = 151$, and 3 comparison, $n = 197$), and 18 teachers from the intervention sites participated in the study. Data from all six schools were analyzed for the evaluation, with two of these schools (one intervention and one comparison) also being analyzed separately as a case study. These two schools had received programming the year prior to this evaluation, with one school receiving the program a second time during the evaluation year. This separate case study used the same measures as the larger

evaluation but was used to explore the lasting impacts of the program as well as the benefits to running the program at the same school two years in a row.

Findings from this evaluation indicated that the program had effects in several areas. Specifically, children who participated in the program, relative to those who had not, had higher levels of empathy, greater motivation to stop bullying and viewed their school climate more favourably. Additionally, students who received the program were better able to accurately identify prosocial and negative behaviours and reported higher rates of self-efficacy in defending others than were students who had not received the program. Further, changes were seen in the number of people who reported being bullied or witnessing another student being targeted, with students who had received the program reporting both witnessing and experiencing significantly fewer instances of bullying behaviour than did students from the comparison sites. Behavioural changes were also found with respect to how students address bullying when they are being targeted, with students who received the program being more likely to respond to bullying in an appropriate way than were students who had not received the program. Finally there were changes in the number of reports regarding the use of specific behaviours, including verbal, social, and physical bullying, and the use of threats and intimidation, with program participants using and experiencing significantly fewer aggressive actions than were students in the comparison groups. In each of these areas, the impacts of the program were most often seen with the students who received the junior level (Grades 4 through 6) of the program.

Similar findings were revealed in the case study data, with group by time interactions being found for every major cognitive outcome, with the exception of identifying pro-social behaviours. Once again, the changes seen indicated increases in these areas for students who received the program relative to those who did not. Further, changes were again found with

respect to reports on witnessing or experiencing bullying behaviour with students who participated in the program for a second time reporting greater decreases in these areas than did students who only received the program once. In all cases, data from the junior level students once again indicate that the older participants who received the program benefitted most in terms of the changes that occurred over the course of the evaluation year.

Qualitative data from students and teachers also support the strength of this program, with students readily providing complete descriptions of various program aspects and of situations in which they have utilized the skills learned through the program. Teacher reports also reveal positive impacts that they have observed in their schools following the program. Finally, both students and teachers indicated that they were very satisfied with the program and provided areas for strengthening the existing delivery of the program.

In the discussion section of this dissertation, I describe the results of the study as they relate to previous research, specifically in terms of empathy, school norms, and the importance of developing the social skills required for addressing bullying. I also offer suggestions for improving the effectiveness of a largely successful program, based on current literature and feedback from program participants and the facilitator. Finally, I discuss the strengths of this evaluation, the limitations to the current study and its design, and a strategy for knowledge translation.

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Introduction

In this dissertation, I present an overview of bullying in terms of its prevalence, the various forms that it can take, and the short and long-term impacts on the youth involved in bullying situations. Additionally I examine some of the theories that have been applied to bullying to explain both why it begins, and why it continues. A discussion on what is currently being done to help reduce and prevent instances of bullying follows. Policies taken up by both the Ontario Ministry of Education and the Waterloo Region District School Board are presented, along with a number of frameworks for preventing bullying and some of the problems found with these approaches. I then introduce a skills-based approach to bullying prevention, designed and implemented by the John Howard Society Waterloo-Wellington (JHS WW), followed by the procedures and results of a mixed-methods evaluation of the program conducted in several local elementary schools. Finally, the results of this evaluation and the implications of these results in bullying prevention are discussed.

A note on language: throughout this paper the term bully has been replaced with the terms aggressor, youth who choose to bully, the bullier or similar terms. Correspondingly, victim terminology has been replaced with youth who have been targeted, the targets of bullying or similar terms. This change in language reflects a growing trend in bullying research to move from value-laden labels to terms which accurately reflect and emphasize the choices, behaviours or experiences of the youth involved in the bullying dynamic. This language is also reflective of the terms used to discuss bullying with students who participate in the program being evaluated and who were invited to participate in this study.

Chapter 1 - Overview of Bullying

The extant research on bullying generally falls into two main categories. The first, which Seeley, Tombari, Bennet and Dunkle (2009) have coined the bullying strand of research, is descriptive in nature, focusing on defining bullying, assessing its prevalence and impacts, and identifying prevention and intervention strategies. The second area of research is explanatory in nature, focusing on theories of bullying behaviour in order to better understand the processes and structures in place that support the development and continuation of bullying behaviour (Seeley et al., 2009).

Descriptive Research

This section will provide information on the components of research found in the descriptive strand including the definition of bullying, its prevalence (both in terms of how many people are being bullied at any given time and across the lifespan), and the different ways in which bullying occurs. A discussion of who is involved in bullying and an overview of the impacts on youth who experience and perpetrate bullying will also be included in this section. The final piece, the identification of prevention and intervention strategies will be presented later in this section of the dissertation, following a discussion of the explanatory strand of research.

Defining bullying. In looking at the descriptive strand of research, the most commonly used definition of bullying was developed by Olweus (1993) who defined bullying as repeated, negative actions which are meant to intentionally cause harm to another person and involve a power differential between the person who is bullying and the target. While this definition is the one that is most often used in bullying research, it is not always viewed as adequate as it raises questions about the meaning and importance of many aspects of the definition. To begin, one can question how frequently a particular behaviour needs to occur or what constitutes intentionality

on the part of the person doing the bullying in order for that particular behaviour to be defined as bullying. Further, the component of a power differential has proven to add a layer of difficulty in assessing bullying behaviour given that, while it has been identified as a critical piece in the bullying dynamic, few students understand or incorporate this differential in discussing their experiences with bullying (Bradshaw, 2015).

An additional issue is that this definition does not speak to the perceptions of the target of bullying. It is important that we look at the experience of the person who has been targeted in addition to the intent of the aggressor and the specific behaviours included in the definition. For example, if an ongoing behaviour is not meant to intentionally cause harm but the target experiences harm, this may still be an act of bullying. Likewise, if a person is being repeatedly targeted, but by different people each time, they still may be being bullied even if no persistent aggressor can be identified.

As a result of such concerns, there is a lack of consensus among researchers with regards to what the definition of bullying should be. One definition, proposed by Pister (2014) seeks to expand upon and address the weaknesses of earlier definitions. Here, bullying refers to:

Any repeated negative actions carried out by one or more persons towards one or more persons over an extended period of time. Additionally, the bullying situation must be an oppressive act that carries with it an element of power, either in that the aggressor has greater social power than the target, is acting in order to gain or maintain this power, or is acting in a way that negatively impacts the feelings of power held by the target. Finally, the actions carried out within the bullying dynamic must be done with either the intent to cause harm or with an outcome of physical, mental, or emotional distress or lead to negative social impacts for the target. (p. 25)

The prevalence of bullying. A great deal of research within this strand has been conducted in order to ascertain how often bullying occurs. Large, international studies have reported that, on average, approximately 27% of high school students are involved in bullying, either as the aggressor (11%), the target (13%), or as both (4%) (Jansen et al., 2012). Further reports on rates of bullying in young elementary school children found that 34% of children were involved in bullying in some way including as aggressors (4%), the target (17%), or both (13%) (Jansen et al., 2012). Rates of bullying in Ontario are similar, although data were only available for students in Grades 7 through 12. The most recent findings of the Ontario Student Drug Use and Health Survey (OSDUHS), indicate that 25% of students surveyed reported being bullied in the two months prior to the study date; translating into approximately 256, 200 Ontario students (Boak et al., 2014). However, authors have critiqued the methods used in gathering these data, stating that most self-report studies ask students very general questions about bullying, rather than asking if they have experienced specific examples of bullying behaviour. A major issue with such measures is the use of value-laden terms that might create a hesitation in youth to indicate that they have either bullied others or have been victimized themselves. It could be that using specific examples, such as asking individuals if they have called another student a name, might give a more accurate picture of the prevalence of bullying (Elsea & Rees, 2001). A second problem with how bullying has been assessed is that over the life course people define and experience bullying differently at different times. For example, young children are more likely to experience and perpetrate overt forms of bullying, such as physical bullying, while indirect or relational forms of bullying, such as exclusion, gossip, and name calling, are more commonly seen in older age groups (Elsea & Rees, 2001). Third, most studies frame the question in order to obtain data for a specific time period, for example asking youth if they have been bullied in the

past two months. While they may not have been victimized in this short period of time, this does not mean a student did not have a significant experience with bullying in the past. As a result, data showing that 30% of students are being bullied at any given time is an inaccurate representation of the lifetime prevalence rates. In order to investigate lifetime prevalence rates further, Elsea and Rees (2001) conducted two retrospective studies in which they asked adults to indicate whether they had been bullied at any point during their lives. Findings from these studies show that bullying may be much more widespread than previous reports indicate, with 58% of participants in one study stating that they had been bullied in the past, while a second study had 73% of participants indicating that they had been bullied at some point in their lives. Despite the disagreement, it has been estimated that, worldwide, approximately 200 million youth experience bullying each year (PREVNet, n.d.). Additionally, it has been found that bullying tends to be reported more by children in elementary and middle schools while rates begin to decline through the high school years (Fitzpatrick, Dulin, & Piko, 2007). Overall, while self-report measures have several downfalls, including the possibility of over or under reporting of bullying (Vessey, DiFazio, & Strout, 2013), they are still viewed as being among the most valid forms of assessment in bullying research (Bradshaw, 2015).

Types of bullying. Bullying falls into two main categories, the first being the more overt, or direct forms of bullying, which are often the ones most readily associated with bullying behaviour. These overt forms include both physical aggression, such as hitting, punching, kicking, or pushing (Greene, 2005), and psychological aggression, which include behaviours such as name calling and verbal intimidation (O'Connell, Pepler, & Craig, 1999). Physical aggression is the least common form of bullying, with only 4% of respondents in one study indicating that they had been physically victimized (Paglia-Boak et al., 2012), and a later report

finding that 1.7% of students were primarily bullied through physical means (Boak et al., 2015). Psychological aggression, on the other hand, is the most common form of overt bullying, with 23% of respondents in one study indicating that they had experienced this type of victimization (Paglia-Boak et al., 2012). Girls are more likely to be both the perpetrators and victims of psychological aggression, while boys are three to four times more likely to engage in, and be the victims of, physical aggression (Batsche & Knoff, 1994; Paglia-Boak et al., 2012; Boak et al., 2015). The second major category includes more covert, or indirect, forms of bullying. This type of aggression includes subtle behaviours, such as gossiping, social exclusion and isolation, spreading rumors, social competition, and social comparison (O'Connell et al., 1999). Such bullying is often relational in nature and generally relies on the use of bystanders in order for it to be an effective form of aggression.

There is another form of bullying which can be either overt or covert in nature (Juvonen & Graham, 2014). Cyber, or electronic, bullying has been gaining attention in light of the increased use of electronic communication, social media, and the internet. Data from American studies indicate that 97.5% of 11-14 year old students in the Midwest had been online in the past 30 days. Sixty-three percent of these youth have a personal cell phone, with many using text messages as a form of communication, and more than 40% being users of social media sites (Cyberbullying Research Center, 2013). Cyber bullying refers to the use of these tools to send cruel or harmful texts or images to others (Willard, 2004) and can often be found on social networking sites, personal websites and blogs, chat rooms and bulletin boards, as well as in instant messages, emails, and text messages. Surprisingly little recent research on the prevalence of cyber bullying is available. Based on what studies have been conducted it has been found that 25% of Canadian youth have been victims of cyberbullying, while more than 50% of youth

stated that they knew someone who had been cyberbullied (Li, 2006). A separate study found that 11% of middle school students had experience cyber bullying, although the researchers argued that this result was likely an underestimation of the true degree of the problem since they had only asked about bullying experiences over the previous two months (Kowalski & Limber, 2007). Most recent Ontario Student Drug Use and Health Survey (OSDUHS) findings indicate that 19% of Ontario students in Grades 7-12 had experienced cyber bullying at least once in the year preceding the study (Boak et al., 2014).

There is disagreement in the literature over who engages in cyberbullying. In terms of who the bullies are, Li (2006) found that males are more likely to engage in cyberbullying, a finding that is in line with research on physical bullying, where boys are more likely to play the role of the aggressor. On the other hand, Kowalski and Limber (2007), as well as Boak et al. (2014), found that girls were more likely to engage in cyberbullying, a finding that is consistent with data indicating that girls are more likely to be involved in indirect forms of aggression while boys tend to use more direct methods. The disagreement continues when looking at who the victims of cyberbullying tend to be, with one study finding no gender difference in victims (Li, 2006), and other research finding that girls are more likely to be victimized (Boak et al., 2015; Kowalski & Limber, 2007). However, it has been found that frequent traditional bullying is linked to higher rates of cyber bullying, particularly for females, and that youth who are bullied at school are also more likely to be victimized electronically and are also more likely to retaliate and begin bullying others online (Kowalksi, Morgan & Limber, 2012).

It has been posited that the “arms-length” nature of cyber bullying plays an integral role in how it is carried out. The anonymity involved offers the protection of invisibility to the perpetrators, while the lack of face-to-face contact means that the bullies are unable to see the

emotional reactions of the victims. The lack of direct connection makes the situation feel impersonal, thus reducing the feelings of empathy that might be triggered upon seeing the victim's pain and creating the perception that no harm has been done (Kowalski & Limber, 2007; Kowalski et al., 2012; Li, 2006; Willard, 2006). The distance between the aggressor and the target may explain why electronic bullying involves repeated attacks because the aggressors are not receiving cues that they have been successful in their intent and so continue long past the point at which they would normally stop if the incident were to occur in person.

Electronic bullying also brings about unique concerns because it does not limit bullying to specific times and places. Instead, youth can be targeted at all hours of the day, as well as in spaces where they should feel safe. Additionally, such messages can quickly be spread to a large number of people, increasing the number of bullies and bystanders involved in the incident (Kowalski & Limber, 2007). Despite its prevalence, the often covert nature of cyberbullying, which allows people to bully others with greater secrecy, makes it especially difficult to expose and to deliver consequences to the aggressors (Li, 2006). The fact that such incidents often occur after school also presents an issue in how cyberbullying is dealt with. While areas may differ in how they address cyberbullying, violence is often only considered to be within the jurisdiction of the school when it occurs on school grounds, during a school-sponsored event, or while youth are travelling to and from school. Outside of these boundaries, there is little that schools can do to intervene, even when the situation involves students from the same school (Greene, 2005; Li, 2006).

In assessing trends in the overall rates of bullying for the different types it has been found that physical bullying tends to decline as children age while rates of cyber, verbal, and social forms of bullying tend to increase with age, particularly between the ages of 11 and 15 years.

Various forms of verbal bullying and aggression tend to remain stable with high report rates throughout high school (Berger, 2007).

Roles in the bullying dynamic. Youth who are involved in bullying are typically placed into one of three categories: the aggressor (the person responsible for the attack), the target (the person being attacked), and the bystanders (peers in the area where the bullying situation occurs). While the greater emphasis is generally placed on the child who is bullying and the target of the bullying, current research has placed equal or greater importance on the role of the bystander who may remain neutral, openly encourage or join the bully, or help the victim (Salmivalli, 1999; Smith, Schneider, Smith, & Ananiadou., 2004). One study, conducted in Toronto elementary schools, found that peers were present in 85% of bullying incidents, but only intervened 13% of the time while peers reinforced the bullying in 81% of episodes (Craig & Pepler, 1997). These figures are in line with other estimates in which peers were found to be present in 81% of bullying episodes, intervening in only 11% of cases (O'Connell et al., 1999), and with a study that found that over 80% of students had witnessed bullying at least once (Pister, 2010). The majority of students reported that they most often act as neutral bystanders who do not interfere in any way, although this behaviour can be a silent form of approval (Salmivalli, 1999) serving to reinforce the bullying rather than stop it (Smith et al., 2004). O'Connell et al.(1999) found that the presence of bystanders in bullying situations was positively related to bullying situations, in that the presence of bystanders who do not help to stop the bullying increases the frequency and duration of bullying episodes, and that peers most often behave in ways that reinforce bullying behaviours. Studies have recently been conducted in order to uncover factors that influence the decision to become an active bystander or to ignore bullying. It was found that being aware of the distress experienced by the target of bullying, and

anticipating personal feelings of guilt or shame for not intervening were positively related to bystander actions (Pronk, Olthof, & Goossens, 2014).

In addition to these roles of aggressor, target and bystander, emerging research has indicated that a fourth role needs to be identified in discussions of bullying behaviour. This is the aggressor-target role, in which the individual is not only victimized by peers but also chooses to bully others. Researchers indicate that it is necessary to assess these students as separate from students who are either aggressors or targets, but not both, as these youth tend to be affected the most by bullying interactions (Bauer, Lozano, & Rivara, 2007).

Impacts of bullying. Research into bullying has uncovered a number of both short and long term impacts on children who bully, targets of bullying, and youth who are involved in both roles. In the short term, youth who are bullied have lower global self-esteem than youth who are not victimized and the more they are bullied the lower their self-esteem becomes. They also view themselves as less popular, less attractive, more troublesome, and less intelligent than their peers (Nansel, Haynie, & Simonsmorton, 2003; O'Moore & Kirkham, 2001; Vessey et al., 2013). It has also been found that targets of bullying tend to be marginalized, have low social status and suffer from increased emotional distress when compared to youth who are not bullied (Juvonen, Graham, & Schuster, 2003; Nansel et al., 2003; Vessey et al., 2013). Additionally, students who are targeted are more likely to have difficulty focusing on school or begin to avoid school altogether. They are also more likely to experience social anxiety, fearfulness, increased aggression, and even weapon-carrying (Greene, 2005). Similarly, youth who bully have been found to have lower self-esteem than those who do not bully others and the more frequently they engage in bullying behaviour, the lower their self-esteem becomes (O'Moore & Kirkham, 2001). They are also more likely to experience feelings of inadequacy in terms of social status and

intelligence and experience more anxiety, are less happy and view themselves as more troublesome than students who did not bully others. (O'Moore & Kirkham, 2001; Nansel et al., 2003). In contrast, Juvonen et al. (2003) found that children who bully experience the fewest psychological symptoms and also tend to have higher status in their peer groups than either targets or youth who have experience with both roles. In the long-term, youth who bully are at higher risk for drug and alcohol abuse, and dropping out of school. Pre-adolescents who engage in bullying behaviour are also more likely to engage in gang activity during adolescence (O'Connell et al., 1999). Issues of power and aggression also tend to have long-term impacts as youth who bully are often involved in dating aggression and sexual harassment during the adolescent years (Pepler et al., 2006). Additionally, 25% of youth identified as bullies early in school will have a criminal record by the time they are 30 years of age (Batsche & Knoff, 1994), with one study reporting that nearly 60% of youth who were identified as having bullied in Grades 6-9 had at least one conviction by age 24 (Banks, 1997).

Youth who have both bullied others and been the targets of bullying have been found to be the most profoundly impacted by bullying situations. Research has found that they make up the most marginalized group of children, that they tend to feel that they are the least socially acceptable of their peers, and are the least popular youth (O'Moore & Kirkham, 2001). In addition to these social factors, these children also display an array of psychological difficulties; they are more likely to report feelings of loneliness and insecurity than children who have only bullied others or been the targets of bullying, exhibit greater degrees of depression, display conduct problems, and have the greatest academic difficulties (Juvonen et al., 2003; Vessey et al., 2013). Children who are involved in both roles also have stronger feelings of inadequacy than do youth who have only bullied and are more anxious, have lower self-esteem, are

unhappier than either youth who only bully or are only targets of bullying (Moore & Kirkham, 2001), are at an increased risk for developing subsequent psychiatric disorders (Juvonen et al., 2003), and appear to have the highest risk for suicide-related behaviours, as compared to either the aggressor or the target (Winsper, Lereya, Zannarini, & Wolke, 2012). Finally, students who fall into this category best fit the profile for youth who have an increased likelihood for future violent offending (Juvonen et al., 2003).

Explanatory Research

In this section I will review information on the components of research found in the explanatory strand and will present several of the theories of bullying which seek to explain why youth choose to bully, how bullying begins and how this behaviour is reinforced and maintained.

Gaining a greater understanding of the scope and impacts of bullying are only two of the areas upon which researchers have focused. An additional concern has been the development of theories examining why bullying occurs to begin with. While many theories exist, it is important to note that none of them offer complete explanations as to why bullying occurs. The number of available theories speaks strongly to the complex nature of the behaviour as it occurs in different social settings, and also presents difficulties in identifying the best way to prevent bullying from happening. It is often suggested that it is prudent to approach these theories from a critical and pragmatic standpoint, understanding the strengths and limitations of each theory, both as a whole and within the context of the behaviour (Rigby, 2004). While a number of theoretical perspectives about bullying exist, the ones included in this paper are some of the more popular theories that also have some empirical validation and are addressed by the program being evaluated for this project. A summary of the different theories is presented in Table 1, following the discussion of the theories.

Theories of power. The dominant theory that has been used to explain bullying behaviour looks at the imbalance of power between the child who chooses to bully and the target of bullying. Here children who are in a position of higher power act aggressively towards their peers who are perceived to have less power. Bullying then is often the result of an effort to gain, increase, or maintain power relative to the target (Rigby, 2004; Smith et al., 2004). The relative power held by children who bully can come from a number of things, including size, strength, age, socioeconomic background, and social status (Pepler et al., 2006). The relative lack of power experienced by targets, and which may result in being selected by the bullier, include being socially isolated, lacking social skills, and having higher anxiety and lower self-esteem as compared to youth who are not targeted (Smith et al., 2004). Another characteristic that helps to form the perception that certain children have less power and are easy targets for bullying is age, with children who are targeted often being the youngest students in a school setting (Batsche & Knoff, 1994). Finally, females who are viewed as less attractive than their peers and males with atypical gender-related behaviours are at the highest risk for assault and harassment, regardless of age (Li, 2006). Research supporting theories of power have found that children who bully have higher relative power, and often have little empathy for their targets (Smith et al., 2004). As such, they may decide to pick on weaker because they do not like them or view themselves as having been provoked by the victim (Batsche & Knoff, 1994).

Theories of power begin to speak to the relational aspect of bullying that has been highlighted by Pepler et al. (2006) as an important way to understand bullying processes. Here, bullying is viewed as a relationship problem – as aggression occurs within the context of a relationship between the people involved as a result of complex interpersonal dynamics – thus requiring a relationship solution that focuses on enhancing the development of healthy

relationships. Theories of power in bullying have also been furthered by assessing the frequency of bullying behaviour in relation to the periods that are accompanied by social reorganization. Such links have been found, particularly with respect to major transitional periods, as when students transition from elementary school to middle schools, and again during the transition to high school, which are often accompanied by peaks in bullying behaviours (LaFontana & Cillessen, 2010).

Social learning theory. Bandura's social learning theory has also been used as a theoretical perspective capable of explaining why bullying occurs. Within this theory it is stated that learned behaviours develop as a result of the experiences and interactions a person has with her or his social environment (Bandura, 1977). Social learning, then, occurs as a result of observation and imitation combined with an assessment of risk through the observation of consequences. Three conditions influence the likelihood that social learning will occur and a particular behaviour will be imitated, or in the case of bullying, repeated, each of which is often present in bullying situations (O'Connell et al., 1999). The first condition is that the model, or the person who is engaging in the behaviour and whose behaviour is likely to be imitated, is a powerful figure (O'Connell et al., 1999). As previously noted, children who bully others are most often the ones who have higher relative power and social standing among their peer group, as compared to the target (Juvonen et al., 2003). This power structure meets the first criterion in that students who witness a person in a position of high social standing bullying others might imitate this behaviour and target either the same child or other children. The second condition is that the model is rewarded rather than punished for his or her behaviours (O'Connell et al., 1999). Such is often the case with bullying behaviour as research has repeatedly shown that people rarely intervene in bullying situations and there are often few or no consequences for the

youth who has bullied (Milsom & Gallo, 2006; O'Connell et al., 1999). In many situations peers reward the bullier for his or her behaviours by smiling, laughing, cheering him or her on, joining in the bullying as well, or even through failing to seek assistance for the target. Although the bystanders to the bullying situation may not like the aggressor, or even agree with their behaviour, they are still likely to offer support for the bullier as a way to protect their own social standing, reputation, and safety (Salmivalli, 2010). The aggressor may also be rewarded by the impact of the bullying behaviour on the target if he or she becomes visibly upset. Each of these factors helps to fulfill the second component of social learning. The third and final component is that the model is similar to the other children (O'Connell et al., 1999). As bullying most often occurs within schools or in social settings, the aggressor is generally quite similar to both the targets and bystanders in terms of age and peer group. Additionally, students who identify more with the student who is bullying, than with the target are in turn more likely to imitate the bullying behaviour and target other students.

Social learning theory can also be used to explain the connection between the home environment and bullying, with bullying behaviour being learned through the aggressor's experiences within the home. It has been found that youth who bully often come from home environments that can be described as negative and in which the child may have parents who are hostile and rejecting, use physical discipline, have poor problem-solving skills, teach their children to strike back when provoked (Batsche & Knoff, 1994) and have a strong need to dominate others (Smith et al., 2004).

Desensitization. A third view on why bullying occurs, or continues, involves looking at desensitization. Using this perspective, research has found that repeated exposure to violence, such as through playing video games or watching violent television shows, leads to a decrease in

arousal responses when faced with real-life experiences with violence. This is not to say that the use of violent video games is predictive of bullying behaviour, indeed the impact of television and video games on violence is a controversial area with recent studies finding little link between the two (Ferguson, Olson, Kutner, & Warner, 2014). Rather the link between bullying and repeated exposure to violence is on the recognition of the severity and impact of bullying on others as it becomes increasingly common place. One such impact is on the feeling of empathy for the person who has been targeted by the violent act. Here, desensitization has been linked to bullying behaviours with O'Connell et al. (1999) citing research findings that there is a decrease in empathy for targets of bullying, particularly if the bullying occurs over an extended period of time and with increased age. This is supported by studies finding that students often hold beliefs that bullying serves to toughen up weaker students or that the targets of bullying had done something to deserve the bullying (Oliver, Hoover, & Hazler, 1994). It appears that frequent exposure to bullying may lead youth to become desensitized to the severity of the act or the impact that it can have on others, thus reducing their levels of empathy with regards to bullying. Studies have found that attitudes, such as a lack of empathy, have been able to predict involvement in bullying (Oliver et al., 1994) with youth who are low in empathy being more likely to bully others (Jolliffe & Farrington, 2006). The same can be said for the impact of desensitization on bystander behaviour as youth who are low in empathy are less likely to intervene in bullying situations (Nickerson, Mele, & Princiotta, 2008).

Table 1

Theories of Bullying

Theory	Explanation of Bullying
Theories of Power	<p>Dominant theory to explain bullying behaviour</p> <p>Involves the imbalance of power between the child who chooses to bully and the target of bullying.</p> <p>Bullying occurs in order for the aggressor to gain, increase, or maintain, power relative to the target</p>
Social Learning Theory	<p>Bullying is a learned behaviour that develops as a result of experiences and interactions with social environments.</p> <p>Social learning occurs as a result of observation and imitation combined with an assessment of risk through the observation of consequences.</p>
Desensitization	<p>There is a decrease in empathy for targets of bullying, particularly if the bullying occurs over an extended period of time and with increased age.</p> <p>Decreases in empathy lead to increases in bullying and decreases in bystander intervention on behalf of the target.</p>

Chapter 2 - Preventing Bullying

Legislative Approaches

The identification of strategies used to prevent and intervene in bullying is the final component of the descriptive strand of research. Given the extent of the bullying problem, it is not surprising that prevention strategies have been at the forefront of the political arena. Since the mid-1990s every province and territory in Canada has been working towards the development and implementation of anti-bullying strategies and policies. Ontario has been a leader in such developments as one of the first provinces to introduce legislation that focuses specifically on bullying with two Bills (Bill 13 and Bill 14) being introduced by the Liberals and the Progressive Conservatives on the same day (Mitchell, 2012). Despite these advances, legislation has been criticized for not being able to adequately address the issue of bullying, particularly in cases where the legislation includes zero-tolerance policies and/or progressive discipline models. Zero-tolerance policies often carry with them mandatory responses to bullying behaviours that are applied in a way that does not consider context or circumstance, rarely providing any opportunity for discretion around the consequences for the behaviour. Such policies are often seen as punitive and are often not perceived by students as fair, logical, consistent, or equitable thus reducing their ability to be effective (Safe@School, n.d.). The progressive discipline model is meant to promote positive student behaviour by allowing the principal to choose appropriate consequences for inappropriate behaviours. Such consequences may include intervention strategies such as anger management counseling along with the withdrawal of privileges, suspension, and even the recommendation of expulsion from an individual school or all schools within a board (Ontario Ministry of Education, 2009).

A major concern with these strategies is the inconsistency with which discipline may be applied. Of particular concern is that both of these policies provide teachers and principals with a great deal of discretion in using suspensions and expulsions to combat bullying rather than encouraging strategies which focus on addressing the root cause of the bullying problem. Despite their popularity, no empirical evidence supports such policies as an effective strategy for addressing bullying. Instead, it has been found that the zero-tolerance approaches are often discriminatory in practice and create a culture of distrust between students and school staff (Stinchcomb, Bazemore, & Rienstenberg, 2006). A major critique of the policies that do exist, and in fact the way that Canada as a whole is approaching bullying is that such policies prioritize the development of legislation at the expense of adequate education and research (Mitchell, 2012). The concern here is that we will end up with an abundance of laws and policies without much progress as legislation alone is not enough to combat bullying. That said, most policies that exist across Canada include a focus on the need for awareness and education about bullying for students and include some guidelines for discipline when students behave inappropriately. Additionally, most policies place the onus on schools to combat bullying and mention the need for individual schools to address bullying through the use of effective prevention programming.

School Based Prevention Programs

Currently, there is a registry of bullying prevention programs on the Ministry of Education's (2013a) website. However, it is simply a list of potential options, none of which has been officially approved by the Ministry. Additionally, while a checklist of components is provided for each program, helping schools identify which ones meet good practice for prevention programming and which will work best in their school, the majority of these programs have not undergone a formal evaluation and many do not include evaluative measures

for use by schools that wish to assess program impacts. As such, area schools must implement an effective prevention strategy with no indication of which programs may fulfill this requirement.

In the following section I discuss some of the more common prevention approaches for elementary school age children found on the ministry's website (summary found in Table 2 following presentation of the approaches). The most common strategies can be broken down into different types based on their scope and format. Additionally, programs that fit into each of these strategies can be further categorized based on the educational method used. A number of programs used by schools are information-based, focusing simply on teaching students about bullying and its consequences. A format that is likely more successful involves skills-based programming. Programs utilizing this format go beyond simple education to teaching students necessary skills for assertively and effectively addressing bullying. Ideally, such programs will also provide students with opportunities to practice these skills in a controlled environment prior to having to use them in a real life situation. Skills-based programming can be included in each of the following categories (targeted approaches, whole school approaches, comprehensive programs, and workshops and presentations) to different degrees.

Targeted approaches. While not a category that can be applied to the prevention options provided on the Ministry's website, this approach is commonly used in school settings and often follows the progressive discipline approach that the Ministry has mandated that every school in the province must use (Ontario Ministry of Education, 2009). Targeted approaches include those interventions that are focused specifically on the youth involved in bullying, either those who have targeted other students, youth who have been targeted, or both (Juvonen & Graham, 2014). Typically, these targeted approaches involve some form of mediation between the aggressor and the target in an attempt to increase empathy and understanding in the aggressor. While common,

such approaches may neglect to consider the role that rest of the students in a school play in the bullying dynamic, particularly the bystanders who are often in need of guidance in terms of how to address bullying when they see it happening. Additionally, focusing efforts on such a small number of students makes it difficult to create change in terms of the overall school climate. Finally, the amount of knowledge or skills gained by the students by using this format is questionable and strongly depends on the expertise of the staff person facilitating the conversation.

Whole-school approaches. The second major category of prevention programming is the use of a whole-school approach, taking the position that since all students are involved in bullying in some way, be it as the bully, the target, or as the bystander, all students should be targeted by the prevention strategy (O'Connell et al., 1999; Salmivalli, 1999). Beyond addressing the various players in bullying situations, these approaches have the benefit of avoiding the labelling and stigmatization that can occur when students are singled out for programs that are directed only at one of the above groups (Smith et al., 2004). These approaches can also help to avoid problems that might arise in needing to identify youth who are either bullies or victims, as many youth do not come forward if they are being targeted and not all youth who bully are known as being aggressors. As a result, all students can benefit, even if the students have not been identified as being in need of such a program. Yet another benefit is that the use of whole-school approaches can help to avoid difficulties that might develop by bringing together groups of aggressive children in the same venue (Smith et al., 2004). This format may be particularly important given recent research on bully-victims as direct approaches may result in bullies and their victims (who are bullying others) unwittingly being brought together without staff being aware of underlying tensions that may exist. Finally, research also shows that it might be easiest

to target and change the behaviours of bystanders than those of either bullies or victims and that the elimination of the positive reinforcement often given by bystanders could lead to a decrease in overall bullying (Salmivalli, 1999). Additionally, as most students find themselves in the role of the bystander at one time or another, an approach that targets bystanders who are also bullies or victims might allow for more gradual changes in the behaviours of these youth as they develop new skill sets.

Comprehensive programs. Comprehensive programs include those programs whose reach moves beyond the boundaries of the school to include parents and other community members in seeking to prevent bullying. These approaches require a great deal of dedication on the part of all of those involved in the program. The popularity of the comprehensive approach can be traced back to the enormous success of the Olweus program which originated in Norway in the mid-1980s and was developed by Norwegian psychologist, Dan Olweus. The Olweus program incorporates the school, classroom, community and individual, with additional attention given to students who are identified as bullies or victims, in its comprehensive, systems change approach to bullying prevention. The aim of the program is two-fold including - reducing existing bullying in schools and preventing the development of new bullying problems, and achieving better peer relations at school in students in Grades 3 – 10 (Olweus, 1993; Olweus Bullying Prevention Program, n.d.). The core components of the program include awareness of the issue of bullying as well as involvement on behalf of the adults in the school and at home through various school-wide, classroom based, and individual activities (Olweus, 1993).

While the original program saw a 50% reduction in rates of bullying (Olweus Bullying Prevention Program, n.d.), subsequent replications of the program, particularly in the United States, have not yielded such results, with some attempts showing non-significant results and

even finding negative results in some cases (Smith et al., 2004). This discrepancy in the effectiveness of the program may be due in part to the differences between the original sites and where the replications have taken place. First, there is a difference in school structure, with Scandinavian schools typically having smaller class sizes and teachers who have received additional training in delivering this bullying prevention programming. Additionally, the political and historical context might play a role in the program's success. In Norway, there has been a focus on state intervention into social welfare matters with the program itself being implemented on a national level following a string of several bullying-related suicides. Finally, the success of Olweus' program may be compromised because of the high level of awareness and involvement needed from adults both at school and at home, a requirement that may be increasingly difficult to meet in a society where adults' attention can often be stretched quite thinly with other commitments or where adults may see bullying as a normal and harmless occurrence as children age. Overall, it is likely that the variations in success of the program might be a result of the inability of the program to be either diluted or adapted to different school or cultural settings while maintaining its effectiveness (Smith et al., 2004). While the success of these programs is not conclusive, it must be noted that, in some cases, the effectiveness of the comprehensive program was not apparent until follow-up, indicating that this approach may have more potential than the evaluation data indicate. In any case, there is not enough evidence to either recommend the use of the comprehensive approach to the exclusion of any other program type or to abandon it entirely (Smith et al., 2004).

Workshops and presentations. Some of the most common approaches used in North America can be classified as presentations or workshops in which an expert or outside group is hired to come into the school and present information on bullying along with strategies providing

students with ways of standing up against bullying or getting help if they are being targeted. The workshops and presentations are generally very short lived, lasting only a few hours or a full day. Such programs help schools meet the requirement of implementing prevention and intervention programming with little time, effort, or preparation being required of school staff or students. On occasion, these types of programs can be implemented without an outsider coming into the school. In this instance, teachers present the material to their class over a series of sessions, although these too are generally short-term, being wrapped up in a few periods over the course of a few days or weeks. Workshops and presentations can also vary in terms of the scope of the intervention. Whole school assemblies are quite common and while they are larger in scope in terms of audience, they do not offer much depth as they are very time limited. Workshops, on the other hand, are often more intensive but their scope is limited in terms of how many people can attend. A number of options are available as training sessions only for school staff, while others involve full day retreats for a small group of students. Despite a review of both the grey and scientific literature on the effectiveness of bullying prevention assemblies, workshops, and motivational speakers, I have been unable to find evidence of the effectiveness of these approaches. At this time, no evaluation results speaking to the impacts of such formats are available and may be an area for future study. However, while these programs are generally quite engaging and interactive, and often receive positive short-term feedback, it is unlikely that such programs would be impactful enough to create lasting change, especially across the entire school. This is particularly true given the inability of such formats to meet several of the principles of effective prevention programs established by Nation et al. (2003) (to be discussed later in this paper), particularly in terms of comprehensiveness, the use of varied teaching methods, and the need for sufficient dosage.

Skills-based social-emotional programs. Social-emotional learning (SEL) involves helping children to develop a set of social and emotional skills that will help them to effectively deal with challenges that they face (Smith & Low, 2013) while helping them learn to understand the perspectives of others, create positive relationships, make responsible decisions, and learn effective strategies for addressing interpersonal situations (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). In helping students to build the skills and develop positive individual and peer attitudes as a method for the prevention of bullying, SEL focuses on the development of empathy, emotion management, social problem solving (including assertiveness), and social competence (Smith & Low, 2013). These new skills and behaviours are broken down and then taught to students through a sequence of activities that occur over several sessions (Durlak et al., 2011). Several studies have found a number of positive benefits to the use of SEL frameworks. A meta-analysis of more than 200 evaluations found improvements in areas such as connectedness to school, social behaviour, and more positive attitudes in student's views on themselves. Further, these evaluations found decreases in conduct problems and emotional distress. Other studies have found positive impacts on sense of community within the school and reductions in delinquency, truancy, dropout rates, and violent behaviours (Durlak et al., 2011). As SEL relates to bullying prevention specifically, randomized evaluation of 33 schools conducted by Brown, Low, Smith, and Haggerty (2011) found that the use of SEL components led to improvements in social competence and overall school community, while increasing the positive interventions of both students and staff in bullying situations. Further, the study found that there was a significant reduction in physical bullying in the schools using SEL programming.

While none of the approaches discussed above has been found to consistently reduce bullying with high rates of success, even small gains are important and can set the stage for larger changes as time goes on. It must be noted that changes in even one small group of students or in one grade level may lead to a spillover effect that, over time, could lead to a change in the overall school climate as students begin to model appropriate behaviours that are reinforced by school staff.

While several different types of bullying prevention programs have been developed using a variety of approaches, the results of evaluation efforts of these programs have been mixed. Several authors have performed reviews of existing evaluations often finding a substantial number of programs with no significant effects. For example, Farrington and Ttofi (2009) found that, out of 44 program evaluations and randomized control trials, only 20-23% of programs led to a decrease in bullying, while 17-20% were associated with decreases in victimization. Further, the more rigorous the design used in the study the smaller the effect sizes of program outcomes were. More recently, Evans, Fraser, and Cotter (2014) found that, out of 32 studies on 24 different interventions, only 50% of the programs they reviewed reported significant effects on bullying behaviour while 45% showed no significant effects, with the remaining 5% reporting mixed results.

Table 2

School-Based Approaches to Bullying Prevention

Approach	Main Focus
Targeted	Interventions focused on the youth involved in bullying – both targets and aggressors Generally includes mediation Often follows progressive discipline models Reactive rather than preventative
Whole School	Programming addresses all students based on the position that position all students are involved in bullying in some way All students benefit from programming even if they have not been identified as requiring support Focus includes addressing bystander behaviours
Comprehensive	Program reach includes parents and other community members in order to prevent bullying
Workshops and Presentations	Programs in which an expert or outside group presents information on bullying and strategies to address aggression. Often short lived, lasting only a few hours or a full day Little follow up
Skills-Based Social-Emotional Learning	Programs through which students learn skills that can be used to prevent bullying May include socio-emotional regulation, strategies to defend others, information on seeking help etc. Focus is on behaviour in addition to the provision of information

Chapter 3 - The John Howard Society WW Bullying Prevention Program

While research has uncovered a great deal of information about bullying, from prevalence rates to outcomes, and many theories exist as to why youth bully one another, more work needs to be done in order to identify a consistently effective prevention program. One promising program has been designed and is delivered by the John Howard Society of Waterloo-Wellington (John Howard Society WW or JHS WW) and has been used in schools throughout Kitchener-Waterloo for nearly a decade. Within the past five years alone the program has been run in approximately 50 different schools, with 15 to 20 schools receiving some type of programming each year. Although the John Howard Society WW has focused on bullying prevention in some way for several years, the programs in their present format were developed in 2005. At that time, the current program coordinator reviewed the literature on bullying and the constructs that are understood to be associated with bullying behaviour. In keeping with pedagogy, the goal was to break down a behaviour into its composite parts in order to develop programming that would allow youth to identify with the concepts regardless of their experience. Drawing on her teaching and child studies background, the program coordinator set out to create an engaging and entertaining program that could deliver the messages in simple, easy-to-understand language. It was also important that the program sessions could provide youth with the practical skills needed to make positive, assertive choices in their interactions with others. The foundation of the program lies in the belief that bullying results from a breakdown of social skills, a lack of empathy, a lack of connection between students, the disappearance of accountability, and the lack of understanding of the impact of personal choices on others. Thus the program seeks to help students build respect both for themselves and their peers with the intended impact of changing the way they interact with one another. Additionally the material

presented in the program is designed to help students build skills and competencies that will help them make positive choices, while increasing awareness of bullying in children from Junior Kindergarten through Grade 6 (J. Sobotka, personal communication, September 15, 2013). These elements are in line with previously discussed research by Pepler et al. (2006) who describe the need for bullying solutions which focus on building positive relationships and prosocial skills. Further, as discussed in the previous section, recent research has focused on the benefits of social emotional learning (SEL) when used as a component of bullying prevention programming.

Another important aspect of the program is the movement away from the use of labels such as the bully and the victim and instead speaking about bullying as a choice or an action (i.e., the bullier, the person who chose to bully) while the victim becomes the target, or the person who has been targeted. The rationale for this change in language comes from research and anecdotal evidence pointing to a stigma around the bullying. When using the traditional bully/victim language, students may feel less comfortable talking about their experiences and struggle to communicate their ideas for fear of becoming associated with these terms. They may also have difficulty identifying their own behaviour as bullying if they do not see themselves as bullies. This change in terminology also allows for the behaviour to be separated from the child by saying that a person chose to bully instead of using the term bully to describe that child, as part of his or her identity. Similarly, this change helps to address issues around labeling that may result in a child internalizing these labels and adopting victim or bully as part of their identity or that of others and treating them according to these labels. Overall, the focus needs to be on tangible actions and reactions so that these behaviours can be targeted and addressed (J. Sobotka, personal communication, September 15, 2013).

The JHS WW bullying prevention program falls into two different levels, or streams, of programming. The need for this separation of programming for primary (JK to grade 3) and junior (Grade 4 through 6) students stems from child development theories and allows for information to be provided in ways that are consistent with each group's developmental needs. The primary level, called *One by One We Get Along*, serves students in Junior Kindergarten through Grade 3, while *The Power Within* is the junior level of programming and is delivered to students in Grades 4 through 6. While there is separate content to the two levels of programming program, the same format for program delivery is utilized for both levels. The program is delivered within individual classrooms and is comprised of five separate half hour sessions delivered one week apart, with each class receiving a total of 2.5 hours of instruction over the course of the program. Each half hour session is designed to build upon the previous session and provide new information and skills development opportunities to students. Multiple classrooms within a school receive the program over the same five week period. Skills taught throughout the five weeks are aimed at targeting behaviours that underlie the decision to bully others and the ways that targets of bullying and bystanders respond to bullying situations. Consistent with SEL and skill development frameworks, the program rests on the assumption that the social skills held by youth will impact whether or not bullying will happen in a school. By addressing areas such as empathy, self-esteem, and skill development, and providing children with the opportunities to explore these constructs, youth will feel less inclined to bully others and will be more likely to intervene appropriately when bullying does occur. The spacing of the program through weekly sessions allows children the opportunity to learn and practice new skills over time while having the use of these skills reinforced with continued learning. The aim is for children to feel comfortable using these new skills independently by the time that the program is completed. One

of the most critical pieces to effective SEL practices and skill development is the inclusion of time and opportunity for youth to practice the newly acquired skills (Salas & Cannon-Bowers, 2001).

One by One We Get Along (Primary Grade Level Programming)

This stream of the program is directed at children up until about seven or eight years of age. During this time, children are in what Piaget defined as the pre-operational stage of development and are beginning to enter the concrete operational stage (Piaget & Cook, 1952). In this stage children's thought processes are still developing and they are generally only able to see the world from their own viewpoint, often assuming that others share the same view. As a result, the primary division of the program caters to the egocentric, concrete thinking abilities of younger children and focuses mostly on the self. The use of multiple learning and teaching styles is included here as program material is delivered through song, games, rhymes, and stories. Over the course of five weeks, students explore a variety of skills and concepts related to bullying. The first session focuses on an introduction to bullying and the three-part definition used to identify bullying behaviours: that it must be hurtful, intentional, and repeated. Students are given opportunities to practice identifying bullying in a variety of different scenarios. The second session focuses on passive, aggressive, and assertive choices. Program specific language is taught as Fred the Red (aggressive choices that make the individual happy but upset others), Sue the Blue (passive choices that make others happy but upset the individual) and Hello Yellow (assertive choices that make both people happy). Children are taught how tone and word choice matter in interacting with others and are given the opportunity to practice assertive strategies when faced with various social situations. The focus of the third session is on problem solving skills that promote solutions that satisfy both sides. Youth are taught the ABCDs of problem

solving in which they use the previous assertive skills of tone and word choice to A- Ask if there is a problem and what it is (Don't assume or guess); B – Brainstorm a different ways to solve the problem; C – Choose the solution that will make both people happy; and then D – Do, or act on the chose solution. Students are again given the opportunity to practice working through problems using this format. The fourth session teaches students about goal setting and acceptance. Resiliency is built as children are taught about the importance of perseverance and seeing mistakes as opportunities to learn and try again. They are taught a rhyme that reinforces these principles. The final session revolves around reporting behaviours to a teacher. Students are taught about the difference between tattling (getting someone into trouble) and telling (helping to get someone out of trouble) and are encouraged to follow the 2D Rule: if there is damage or danger students should tell a teacher immediately. At this point, students are encouraged to use all of the skills they have previously learned to identify danger, assertively deal with the situation through problem solving skills, seek help from an adult, and continue to try if a solution is not successful.

The Power Within (Junior Grade Level Programming)

Students who receive the junior level of the program are generally between the ages of seven and twelve and have moved into middle childhood. According to Piaget, children at this age are in the concrete operational stage of development and are capable of more logical thought than they had previously engaged in; also they are able to take into account multiple aspects of a situation prior to reacting. Children are now able to understand causality and apply logic to inductive and deductive reasoning tasks (Piaget & Cook, 1952). As such, programming at this level involves a more in-depth approach in analyzing motivations for behaviours and the prediction of possible outcomes. This part of the program includes a great deal of discussion and

debate, often centered on challenging past beliefs and gaining new understanding of the choices people make. As with the primary program, the first session provides students with an introduction to bullying including discussion around the assumptions and beliefs people have about bullying, the three part definition, and a look at the five different types of bullying discussed in the program including physical, verbal, social, cyber, and threats and intimidation. In the second session response choices are reviewed. Students are taught about the “power jar concept”, in which they discuss the idea that people who feel powerless in a situation, or who lack self-esteem, will try to gain power or self-esteem by taking it from another person. They also focus on how power and bullying are related and discuss aggressive, assertive, and passive choices and actions. At this level these choices are referred to as dragon, knight, and gnome choices, respectively. The third session focuses on the development of assertive strategies for standing up for themselves in bullying situations through the BLAST strategy: B- Body language (stand up tall, look confident), L- Look them in the eyes (show you have equivalent power), A – Act like a knight (stay in control), S – Say “stop” (use two or three words only to tell the other person to stop), T – Tell someone! Tell someone! (Tell an adult at home. Tell an adult at school). In the fourth session these concepts are turned to focus on bystander behaviours. Here, discussion centres on the different types of bystanders and how students can appropriately seek help for their peers. Students learn about bystanders in terms of the bullying fire, which represents a bullying situation. Bystanders are then divided into different categories based on their responses. These response options include the ‘fire watcher’, (i.e., someone who watches the bullying happen but does nothing to stop it), the ‘fire leaver’, (i.e., someone who sees, hears, or knows about the bullying and walks away from it), the ‘fire feeder’ (i.e., someone who makes the bullying worse by encouraging the bullier), and the ‘fire fighter’ (i.e., someone who does

something to stop the bullying). They also discuss how to provide First A.I.D. or how to assist, inform and defend others when bullying occurs. Here, ‘assist’ refers to speaking to the targeted individual and offering support and understanding. The ‘inform’ piece teaches students to speak to an adult and/or caregiver about what has occurred. The final aspect is defending behaviours which cover how to speak to an individual who chose to bully. Skills taught here involve using assertive language and strategies to challenge that person’s thought processes without attacking or becoming aggressive towards him or her. The final session of this level focuses on cyberbullying. Students review terms related to the internet and then discuss the ‘driver’s license rule’, learning that they should never put information that would appear on their license (full name, address, age, etc.) on the internet. Finally they learn how to respond to cyberbullying by using the ‘R.I.D. Rule’ wherein if they receive a hateful, hurtful, or scary message they are not to reply, but should instead ignore or delete the message.

Additional Programming

Programming for older students. In addition to delivering *The Power Within* to Grade 4 to 6 students, this level of programming can be adapted and used with students in Grades 7 and 8, if requested. For these senior students, the majority of the program material being covered is the same. However, there is an increased focus on issues more pertinent to this age group including cyberbullying, internet safety, and mental health. Additionally students use dragon, knight and gnome terminology to talk about suicide, self-harm and substance abuse. Discussion with older students also focus on working through the lack of trust students often place in school staff and other concerns they have that prevent them from seeking help from adults at school.

Assembly presentations. While the majority of the JHS WW program is conducted through small class sessions, which allow for a greater degree of learning, there are occasions

when assembly presentations are used to complement these smaller group presentations. Schools may request an assembly as an introduction to the programming that will occur within the school in order to ensure that everyone is aware of the program and so that key concepts can be presented prior to the individual class visits. An assembly may also be requested by schools that want to review the information with students who previously received the programming. These follow up assemblies are meant to motivate students to continue to act in an assertive, pro-social manner in order to prevent bullying from occurring. If more intensive intervention is required the school may instead request four separate classroom visits at each grade level. Both of these follow up options are designed to remind students about the information they previously learned and work on further developing the skills taught in the program.

School communication. The final piece of programming that occurs is the communication between the school and the John Howard Society WW. In these reports, the JHS WW program coordinator provides a summary report of the students' ratings in order to give a school a sense of what is a priority for its students in regard to bullying prevention. These reports are given to the Child and Youth Worker at the school as well as to the school's administration. JHS WW staff also provides guidance and support to teachers and staff in order to assist them with program concepts as well as with identifying and responding to bullying that may be happening. Resources and tools that complement the program material are also left for staff to use if they choose to continue working on concepts that were taught after the program is completed. Finally, JHS WW staff provides written reports to the principals of each school summarizing the student feedback that was received from the feedback forms filled in by participants on the last day of programming.

Table 3

The John Howard Society WW Bullying Prevention Program

Program	Grade Level	Major Program Components
One by One We Get Along	Primary Division Gr 1-4	Defining bullying as repeated, intentional, and hurtful The Bully Bug Explore aggressive, passive, and assertive behaviours (Fred the Red, Sue the Blue, Hello Yellow) ABCDs of problem solving Reporting bullying to a teacher 2D rule – Danger and damage
The Power Within	Junior Division Gr 5-6	Defining bullying Types of bullying The Power Jar Explore aggressive, passive, and assertive behaviours (Dragon, Gnome, and Knight) BLAST strategy Types of bystanders First AID Cyber bullying
Additional Programing	Various ages	Programming for older students Assembly presentations Special request presentations School communication

Theory of Change

In seeking to reduce bullying and increase assertive behaviours in the students who receive the program, a number of components related to bullying have been identified as target areas for both of the bullying prevention programs. One important piece to bullying prevention is that such programs must target the school environment rather than just individual students or separate classrooms (Banks, 1997; Milsom & Gallo, 2006; O’Connell et al., 1999) if the aim is to see lasting changes throughout the school. As such, the John Howard Society WW provides programming to all students within the school. However if the school does not wish to have all students participate they will focus on all students in either the primary or junior division. In

addition to student programming, support is provided to staff so that they can appropriately respond to bullying situations. While the program does focus on reducing bullying, it is done in a way that promotes a positive school climate and helps the schools to develop anti-bullying norms. The primary focus of the program is on the impacts on students, with identical goals being set for both program divisions. Goals that are anticipated to support these outcomes have also been set for the assembly style presentations as well as for the school communication and support that occurs between the JHS WW and the individual schools. While the desired outcomes are directed towards student growth and development, it is thought that school staff who attend the program sessions will also experience many of the same changes. The theory of change logic model is presented as Figure 1 in the appendices.

The main goal of the program is to reduce bullying while increasing the skills and abilities of youth in dealing with bullying situations. Two of the program activities address skill development to different degrees. First, there are the classroom presentations that are delivered to every class in the school. These five half hour sessions (four if it is a follow-up program) are designed to increase students' knowledge of and ability to identify bullying as well as increase their understanding of the impacts of bullying on others. These sessions also focus on increasing students' awareness of the options they have for responding to bullying, including how to report bullying when they see it happening. Another desired short-term outcome is that students' motivation to become involved in stopping bullying from occurring in their schools will also be increased. The program also aims to increase student's knowledge of what constitutes a negative social behaviour (bullying, speaking aggressively) while increasing knowledge of appropriate responses and the use of these responses when prompted to do so. Additionally, the material presented in the class is designed to increase feelings of self-confidence in students. Finally, the

program aims to increase communication between staff and students in regards to social issues like bullying as they become more comfortable with the topics presented in the lessons.

While less intensive than the classroom lessons, the assembly presentations that are designed to introduce or review the program also have a number of short-term outcomes associated with them. As with the in-class component, these presentations seek to increase knowledge of what bullying looks like, students' ability to identify it, and how to respond to and report incidents of bullying, while increasing motivation to become involved in stopping bullying from occurring. Once again, these presentations also seek to increase communication between staff and students with regard to the issues presented.

In looking at the short-term outcomes that have been established for the school communication aspect of the program, this aspect specifically aims to impact staff in terms of increasing their ability to identify bullying and understand the impacts it can have on their students. Additionally, communication is thought to increase staff ability to respond more appropriately to bullying situations and to increase their ability to prompt students to use appropriate responses. Finally, communicating with staff about bullying and the specific needs of their school and students is likely to increase the communication between staff and students in regards to these issues.

The short-term outcomes that have been established for the program, regardless of the program component that helps to achieve said goals, are theorized to lead directly to a number of intermediate outcomes. The increase in knowledge of what bullying looks like and how to report and respond to it, along with the increase in communication between staff and students and the increase in self-confidence are thought to lead to an increase in the feelings of empowerment that students have with regards to effectively intervening in bullying. Likewise, the increases in

knowing how to respond to and report bullying, along with the increase in communication may lead to increased feelings of safety and inclusion that students have within the school as they are able to contribute to making the school a safer place. The next intermediate outcome is an increase in the reporting of bullying which is expected to occur as a result of being able to identify bullying and understand its effects, and having increased knowledge of the options for responding to and how to report bullying combined with the increased motivation to do so. The increased communication between staff and students is also expected to make students feel more comfortable reporting bullying, resulting in an increase in reporting. An increase in the use of assertive skills to respond appropriately to bullying and conflict is expected to develop as a result of a combination of students' increased ability to identify bullying and understanding of the effects of bullying along with their increased knowledge of how to respond to and report bullying, and the increased motivation to do so. Assertiveness is also supported by students' increase in knowledge of appropriate and inappropriate responses and practicing the use of appropriate responses when prompted. Finally, as they develop self-confidence they will also be more likely to use these assertive skills. In addition to using assertive skills to respond to bullying and conflict, students are expected to show an increase in independently responding to social situations in an appropriate manner. It is expected that this change will come about as a result of the increase in the ability to identify bullying and their knowledge of options for responding in combination with having practiced appropriate responses when prompted and the increase in self-confidence that is developing as they learn these new skills and information. While the use of appropriate skills is expected to increase, the use of negative social behaviours and responses is expected to decrease as students learn what behaviours are appropriate and which are not, practice the use of appropriate responses when they are prompted to do so and

continue to communicate with staff. The final intermediate outcome that has been established for the program is an increase in school-initiated prevention activities. The hope is that schools will continue to work to reduce bullying on their own, aside from the programming offered through the JHS WW as they become increasingly aware of how to identify and understand the effects of bullying, learn what options are available for responding to bullying, communicate with staff and students about bullying and become increasingly motivated to resolve conflicts and bullying as a community.

These intermediate outcomes lead to five main long-term outcomes, the first being an increase in a positive school climate resulting from the increased feelings of empowerment and safety experienced by the students, particularly as they feel comfortable reporting bullying incidents and continue to do so. The continued use of assertive skills to respond to conflict and use of appropriate responses in social all social situations paired with a decrease in negative social behaviours is also likely to lead to a more positive climate. Finally the school continuing to see bullying prevention as important and initiating additional activities is expected to improve overall school climate. The second outcome is a decrease in the number of bullying incidents that occur at the school. As students feel safe and empowered they are less likely to feel the need to act in aggressive ways. Additionally, the increase in the use of assertive and appropriate responses along with the decrease in negative responses will directly impact how often students engage in bullying behaviour. Finally, as bullying is reported more frequently, students are more likely to understand that it is not acceptable and will have consequences, resulting in a reduction in bullying behaviour. The third long-term outcome that is expected to result from the program is an increase in the likelihood of school success. Previously cited research has established a link between bullying and poor school performance. As a result the impact of the program on

students' feelings of empowerment and safety while at school may contribute to their overall academic success. Following this change is an increase in overall school attendance, which has also been previously linked to bullying. Once again, feelings of empowerment, safety and inclusion are expected to contribute to this outcome along with an increase in the use of assertive and appropriate behaviours and a decrease in negative social behaviours. Students, then, are less likely to miss school as a result of being bullied or as a result of discipline for having bullied others. The final long-term outcome for the program is an increase in resiliency as students feel increasingly empowered and safe in a school that works to continue to prevent bullying from occurring. Resiliency is also expected to be impacted as students continue to use assertive skills in responding to bullying and conflict and work to respond appropriately in various social situations.

Effective Prevention Programs

Developing a theory of how a program is expected to work is one step in meeting the first of nine components that Nation et al. (2003) argue are essential to the success of a prevention program. The first component is that programs must be driven by theory, rather than intuition about what should work. As such, programs must have theoretical backing based on accurate information that has been backed by research. The JHS WW programming is guided by theories of bullying, power, child development, and effective prevention programs and these theories are kept in mind as the program is implemented within the schools. Additionally, as Rigby (2004) notes, it is important that bullying prevention programs do not follow from just one theoretical perspective of bullying. The programming provided by the John Howard Society WW addresses each of the major perspectives previously presented, from addressing power differentials through

education and discussion, creating the opportunities for social learning of prosocial behaviours, and resensitizing youth to bullying and its consequences.

A second component identified by Nation et al. (2003) is that programs need to use varied teaching methods that focus on both increasing awareness and understanding of the problem while helping youth acquire or enhance skills related to these behaviours. The use of varied methods are found in the JHS WW programming in several different ways. First, the program is divided into two streams allowing for the material to be presented in a way that is relevant to the age and developmental stages of the students. Additionally, a combination of song, activities, discussions, rhymes and games are used to deliver the information to students, who are also given the opportunity to practice their newly acquired skills in a safe environment.

The third component is that programs need to have sufficient dosage in order for them to have the desired effects, including follow up or booster sessions as necessary. In order to meet the criteria of dosage, programming typically lasts about a half hour each week, which is a short enough time frame to keep students engaged without overwhelming them with information. Although individual sessions are short, the program lasts for a total of five weeks, allowing students an opportunity to become comfortable with material from one session before moving on to the next. As each session also briefly reviews and then builds on the previous material the dosage of the messages being presented also increases. Further, follow-up sessions are made available to all schools involved in programming.

Nation et al. (2003) also state that prevention programs must be appropriately timed if they are to work meaning that they need to occur early enough to have an impact on the targeted behaviour while being sensitive to the developmental needs of the participants. PREVNet (n.d.) the leading Canadian research institute on bullying notes that different age groups will require

different types and intensities of intervention strategies but that in order to be effective bullying prevention must occur before rates of bullying begin to increase, which is identified in the literature as being around Grades 7-9 (Banks, 1997; Milsom & Gallo, 2006; Pellegrini & Bartini, 2000; PREVNet, n.d.). As a result, the implementation of this program with younger students (from Junior Kindergarten to Grade 6) allows programming to be delivered to students who have not yet begun to bully up until this increase occurs. Of note, it has been found that bullying prevention strategies are most effective with younger students; that is prior to the secondary years (Rigby, 2002). However, ongoing intervention is likely essential as bullying can occur throughout the lifespan. As such, interventions need to be sure to meet the developmental needs of children as they age and offer continued education and support to students with respect to bullying. As a result, the JHS WW program is able to serve as a preventative measure and as an intervention method.

The fifth component of effective programs requires that they be relevant to the group that is being targeted, with programs being tailored to the community and cultural norms of the participants. While the JHS WW programming is standard across schools, the opportunities for discussion are individual to each class. Additionally, the communication between the program coordinator and the administration focuses on the specific needs of the school so that these concerns can be focused on and dealt with within the school.

The next component states that programs must be comprehensive in their approaches; that is, they use multiple interventions that address the problem in multiple settings. In order to meet this criterion, the JHS WW bullying prevention program uses a whole-school approach combined with slightly more targeted approaches which refine the program for addressing specific groups or grade levels. The program also makes use of different presentation formats by

including both assembly presentations and the more intimate classroom presentations. Another key piece in terms of varied approaches is the feedback given to administration at each school. Such feedback helps both the program and the school target identified problem areas. Optional follow-up materials are also left at each school for teachers to use with their classes once the program has ended. Finally, while not core pieces of the program, the program coordinator offers talks to the school staff and to parents in order to educate them about bullying and what they can do to prevent it while instructing them on the language that has been taught in the program so that everyone is familiar with the same terminology.

The seventh component asserts that programs need to foster positive relationships, providing exposure to adults and peers in a way that promotes strong relationships. Primarily, the JHS WW programming does foster relationships by helping students to understand their own value and the value of their peers, despite differences or difficulties that they might have with one another. Additionally, the program sessions encourage youth to see adults as sources of support and seek to facilitate conversations about bullying between students.

Nation et al. (2003) also identify the need for program staff to be well-trained with regards to program implementation. In the case of this program, the staff member responsible for implementation is also the one who developed the current programming. New staff who run the program in other locations under the jurisdiction of the JHS WW are trained by this staff member in how the program is to be run before they are able to begin providing programming on their own.

Before looking at the ninth component set out by Nation et al. (2003) there are also a number of pieces that are critical to the success of prevention programs that deal specifically with bullying. As with the previous set of criteria, the JHS WW programming strives to meet several of these elements, the first of which is the clear presentation of the definition of bullying

and its many forms, a key piece to the introduction session for the programming and a foundation on which the remaining sessions are built. The next piece is the need to focus on healthy relationships and explanations of bullying, as well as addressing how peers can assist in preventing and stopping bullying. The curriculum used by the program addresses these components throughout each of the weekly lessons as part of the foundation for the success of the program. This occurs in tandem with another critical piece: the promotion of the development or improvement of social behaviours, which is also a critical focal point of the programming. All of these pieces are found under the overarching goal of the program to promote healthy school environments, one of the final elements discussed by the researchers.

Additional key elements are integrated into the programming to a lesser degree, particularly because the program relies on the use of an outside expert with limited access beyond the individual schools for the time that the program is being run. One such piece is the need to provide materials that can be used by teachers, schools, parents, and students. While this material is provided, it is up to the school to ensure that it is being utilized. Second is the need to address specific issues found in the schools. Here the JHS WW programming relies on the communication component between the program coordinator and the school administration in order to provide the school with guidance in identifying these concerns.

A number of additional aspects of bullying prevention are part of a school's responsibility as determined by legislation that are beyond the scope of the JHS WW program. These include the development of interventions and support for students who are bullied or who have chosen to bully, the development of protocols for safe reporting of bullying situations, and creating safe intervention programs for bystanders. While the program does not address these elements as fully as recommended by Smokowski and Kopasz (2005), they are still supported by

the JHS WW through communication and feedback to the schools as well as through various educational pieces covered in the program curriculum. A final element that is not covered by the program is the need for the program to be systematic and ongoing, in that bullying prevention efforts must be continual and must reach beyond the confines of the school and be addressed as a community.

The ninth and final component put forth by Nation et al. (2003) is also an element discussed by Smokowski and Kopasz (2005). Both authors state that all programs must be thoroughly evaluated in order to determine their effectiveness. Data collected through feedback forms following the completion of the program indicate that short term changes have been made within the schools. Children receiving all levels of programing indicate that they feel safer at school and more confident in their abilities to deal with problems they are facing. Informal conversations have also provided anecdotal evidence of the impacts of the program and the learning that youth take away from the material that is presented. Teachers have reported that children, especially those who have remained quiet in the past, are more likely to come forward when they see bullying happening, using program specific language and examples. Despite a great deal of anecdotal evidence supporting the impact of both *One by One We Get Along* and *The Power Within*, no comprehensive formal evaluation on program outcomes and satisfaction has been conducted thus far.

The bullying prevention programs run through the John Howard Society WW have been used throughout the Waterloo Region for more than 12 years. The increased attention on bullying along with research showing the importance of effective early intervention and prevention programs in combating the problem has resulted in these programs being requested at most local elementary schools. The current project involves the implementation of both a process

and outcome evaluation of the program at both the primary and elementary levels. Process and outcome data will provide insight into how the program is being implemented, where the strengths lie, and where improvements can be made. The outcome evaluation will focus on the ability of the program to meet the goals set out and described in the logic model and theory of change. The overarching goal of the present study is to determine the effectiveness of both of these streams of programming with respect to their prevention and intervention capacities.

Three main objectives have been identified for this research and include: 1) assessing the outcomes of the program for students receiving the Primary and Junior streams of the program; 2) determining the benefits of ongoing programming; and 3) gaining greater insight into the strengths and weaknesses of the bullying prevention programs offered by the John Howard Society WW.

Chapter 4 - Methodology

Participatory Evaluation

The evaluation conducted on the JHS WW anti-bullying program was done by employing a participatory evaluation methodology. Traditional evaluation research often utilizes an expert driven approach in which an outside evaluator is given the responsibility for conducting the evaluation, often adopting a top-down approach to the research as they define the evaluation objectives and methodology and collect and analyze the data with little input from program staff (Aubel, 1999). If staff are consulted during this process it is often just as respondents and informants, rather than as partners in the evaluation (Campilan, 2000).

The field of participatory evaluation has emerged as a result of weaknesses identified in the traditional model. Campilan (2002) discusses several limitations including the snapshot view of programs that are often offered through expert models as conventional evaluations are unable to fully consider the dynamics involved in implementation. A second weakness that has been identified is the limited utility of the results, which may include recommendations that do not fit within the natural constraints of the program. Third is the lack of flexibility resulting from the highly structured approach being used, often forcing the program to conform to the design of the evaluation rather than fitting the evaluation methodology to the needs of the program. A fourth weakness of traditional models is the ability to conduct only short-term evaluations due to cost restrictions. This is often true as no internal capacity has been built that can prepare organizations to continue with longer term evaluations after these funds have been used. A final criticism is the heavy reliance on external expertise instead of tapping in to the skills and knowledge of program insiders. This can result in an inaccurate understanding of the program and a lack of buy-in from program staff and stakeholders.

Participatory evaluation research, on the other hand, has a number of benefits including the ability to identify locally relevant evaluation questions, improve program performance, empower participants, build capacity within the organization, develop leaders and build teams that can strengthen community resources and networks, and the ability to create sustainable organizational learning and growth (Zukoski & Luluquisen, 2002). Additionally, the key involvement by program implementers and decision-makers is believed to lead to results that are more meaningful and more likely to be utilized as a result of the participatory process (Aubel, 2002).

Such forms of evaluation involve a process that is heavily influenced and guided by key program stakeholders with a focus on the active involvement of program implementers. Using this collaborative process, all phases of the evaluation are then carried out with these stakeholders to as great a degree as possible (Aubel, 1999). Members from the organization then play critical roles in the identification of relevant questions, the planning of the evaluation design, the selection of appropriate measures and data collection methods, and in the gathering and analyzing of data (Zukoski & Luluquisen, 2002). Two forms of participatory evaluation are identified by Campilan (2000) the first of which is self-evaluation, or internal evaluation, wherein the evaluation is initiated and led entirely by program stakeholders. The second format, and the one being used in this research, is the joint evaluation, or stakeholder evaluation, format in which the evaluation is conducted through collaboration between program insiders and an external evaluator who has no direct involvement in the program.

The key stakeholders participating in this research are Dr. Joan Nandlal, the Executive Director for the John Howard Society of Waterloo-Wellington, and Jamie Sobotka, the program coordinator who is the primary creator and facilitator of the program that is undergoing

evaluation. To this point, it is important to note that their participation in the evaluation has been integral to the development of the overall methodology. As such, the detailed logic model and theory of change that were developed to guide this research were co-created by Jaime Sobotka and me. Jaime took on a primary role in developing a draft of the logic model used in this project based on the program's existing model, while refinements and clarification of the model were conducted through a series of conversations and ongoing feedback until it provided a strong reflection of the program goals. Additionally, Jaime has played a critical role in developing the overview of the program presented in this dissertation, having provided ongoing consultation and edits to ensure that the program dimensions have been accurately captured.

The design of this study is the result of many conversations with Joan and Jaime about how best to approach the evaluation, who should be involved as participants in the study, what questions should be asked and how the data should be collected. The research questions identified by the team are the same for both primary and junior division students and are as follows:

- 1) To what extent does the program affect the cognitive judgements students make of self and others with respect to bullying situations?
- 2) To what extent does the program impact overall rates of bullying?
- 3) To what extent does the program impact behavioural responses with respect to how students respond to bullying either as a bystander or a target of bullying?
- 4) To what extent does the program impact the degree to which students engage in or are the target of various aggressive behaviours?
- 5) What program concepts and skills do students remember following program delivery?
- 6) What are the long-term impacts of the program one year after students receive it?

- 7) What are the benefits to running the program in the same school two years in a row?
- 8) What are the overall impressions participants have of the program and what changes would they suggest making?

As such, the evaluation of the JHS WW anti-bullying program employed a mixed-methods approach, involving both a quantitative and qualitative component.

Participants

Schools. Six elementary schools within the Waterloo Region District School Board (WRDSB) who had requested the program were asked to be part of the study. In order to determine the impact of the program, three of these schools (herein identified as intervention sites) received programming during the evaluation year while the remaining three schools (herein identified as comparison sites) did not receive the program at that time. Each of the intervention schools was matched as closely as possible with a comparison site with regard to school enrollment, grade levels and location, based on knowledge of local schools and a search of the WRDSB school registry for the selected matching criteria. All schools were located in Kitchener, Ontario with students from junior kindergarten through grade 6. Four of the schools (two intervention and two comparison sites) were medium to large schools, with just over 450 students at each site and had not previously had any experience with either the primary or junior streams of the program. Two of these schools (one intervention and one comparison) offered partial French Immersion programming. The remaining two schools were smaller in size, with around 275 students at each site. Both of these schools had received both streams of the John Howard Society WW program the previous year and served as case study schools to explore the long-term benefits of the program after one year and the benefits of using the program a second

time. These schools will be referred to as School A (two years of programming) and School B (one year of programming).

Students. All students in grades three through six at all six study schools were invited to participate in the study. Data were collected from a total of 348 students broken down as follows. At the comparison sites there were a total of 197 participants at pre-test and 183 at post-test (attrition rate of 7.1%). One hundred and six participants were female and 91 were male. In looking at program grade level, 85 students fell into the primary division while 112 were in the junior category. At the intervention sites, a total of 151 students participated in the study at pre-test and 141 participated at post-test (attrition rate of 7.1%). Seventy-three participants at the intervention sites were female and 78 were male. Eighty-one students received the primary division of programming while the remaining 70 received the junior division of the program.

As previously noted, two of the schools included in the study were also used as a case study for this evaluation. Demographics for these schools were already included above but, separated out, 57 students from School A participated in the pre-test and 54 participated in the post-test (attrition rate of 16.2%). Eighteen of these students were male and 33 were female with 23 students falling into the primary division and 28 into the junior division. At School B a total of 52 students participated in the pre-test and 49 participated in the post-test (attrition rate of 5.8%). Thirty-two of the students were male and 25 were female. At this site, 41 students received the primary level of programming and 16 received the junior level of programming. A breakdown of all schools and student participants is presented in Table 4.

Table 4

Study Participants

School	Description	Primary Division	Junior Division
1 (Intervention)	Kitchener Grades K-6 Partial French-Immersion School 1 – 467 students	n = 21 f = 9 m = 12 attrition = 0	n = 35 f = 22 m = 13 attrition = 2
2 (Comparison)	School 2 – 470 students No prior programming	n = 27 f = 12 m = 15 attrition = 2	n = 27 f = 12 m = 15 attrition = 1
3 (Intervention)	Kitchener Grades K-6 School 3 – 480 students School 4 – 500 students	n = 19 f = 9 m = 10 attrition = 3	n = 19 f = 8 m = 11 attrition = 2
4 (Comparison)	No prior programming	n = 35 f = 20 m = 15 attrition = 2	n = 57 f = 29 m = 28 attrition = 6
School A (Intervention)	Kitchener Grades K-6 School A – 260 students School B – 270 students	n = 41 f = 18 m = 23 attrition = 2	n = 16 f = 7 m = 9 attrition = 1
School B (Comparison)	Previously had programming *used in the larger evaluation and separated out for use in the case study.	n = 23 f = 15 m = 8 attrition = 1	n = 28 f = 18 m = 10 attrition = 2

Quantitative Component – Cognitive Judgements and Behavioural Change

Data collected through the quantitative component of this study served primarily to address questions around cognitive judgements and behavioural changes in students who received programming, as compared to those students who did not. Further, these data were used to partially address questions around the long-term impacts of the program and the benefits to running the program twice in the same school.

Design. Students were assessed over the course of one academic year, using a quasi-experimental, non-equivalent group, 2x2 factorial design with the first factor being intervention vs. non-intervention and the second factor being time (Time One in the fall of 2013 and Time Two in the late winter and early spring of 2014). As the anti-bullying program contains two separate levels of programming, this part of the study included two sub-components: 1) Grade 3 and 4 students receiving the primary level of programming were compared to students in matched comparison schools without the program; and 2) Grade 5 and 6 students receiving the junior level of programming were compared to students in matched comparison schools without the program.

Procedure. Schools selected based on study criteria were contacted in early September, 2013. After obtaining permission from the principals (forms found in Appendix A) at each school, I visited each class to explain to the students what the study was about and what they would be doing if they agreed to participate. Consent forms (found in Appendix B) were sent home with all students whose teachers had agreed to allow their classes to participate in the study. Signed consent forms were then collected prior to pre-test data collection. Data collection for all schools was staggered so that pre-test data would be collected within the two weeks prior to an intervention school receiving the program, with both the intervention and the matched comparison site participating in the pre-test data collection period at the same time. Following this, the program was delivered at the intervention site over the course of five weeks. I then waited six weeks after the final program session before collecting post-test data from the intervention and matched comparison site school. This format allowed for the time between the end of the program and the beginning of post-test data collection to be the same across all schools.

Pre-test data collection took place during one class period, allowing the students approximately 30 minutes to complete the measures. Prior to beginning the survey, students were asked to write their names on a small piece of paper that they then placed into the envelope containing the survey. These papers were later used to generate participant ID numbers and were then separated from the surveys in order to maintain confidentiality. Student names and participant ID numbers were entered into a database so that post-test data could be matched to the pre-test data. Instructions for completing the survey were then given to all students and they were again reminded that their participation was voluntary and that they could choose to omit any question without penalty. During the data collection sessions for the primary students, all questions were read aloud to the students in order to facilitate understanding and compensate for differences in reading ability. Questions were not read aloud for the junior level students, although I remained in the room during data collection in order to address any questions or concerns that came up as students were completing the measures.

Six weeks after the program was completed, I returned to the schools to conduct the post-test. The procedure at this time was the same as at pre-test, with students being asked to first write their names on small pieces of paper that were then placed in the envelopes with their surveys. This paper was then used to match post-test data to the appropriate pre-test data using the participant ID numbers stored in the participant database. Once again, students were given instructions on how to complete the scales and all questions were read aloud for the primary students while I remained in the room to assist the junior level students. While post-test survey for the comparison sites was the same as the pre-test, comparison schools were given an additional set of questions that was used to collect qualitative data. These questions will be discussed in further detail later.

Measures. The measures being used for data collection were created through a collaborative process involving all three members of the research team. Here, the logic model developed by JHS WW staff and refined by Jamie and me for the purposes of this study was used to guide the types of measures that would be used. Following this, I used existing measures and drafted new ones as needed in order to create sample measures for each outcome identified as important for this research. These measures were then reviewed independently by both Joan and Jamie and modifications were made based on their feedback. The preliminary measures were reviewed a third time by both Jaime and myself, examining each item for its importance and validity resulting in a number of significant changes to the original documents. The measures were then reviewed a fourth and final time by the team as a whole in order to ensure that each response format and item was clear and provided value to the study.

As outlined in the literature, it is anticipated that the program will have a number of impacts on this group of students, including increases in students' ability to identify bullying and intervene in bullying situations, a reduction in the instances of bullying, and a more positive school climate. The following measures were used to collect demographic information and assess changes in the students. Measures used for both primary and junior students were the same. Measures can be found in Appendix C.

Demographic information. Participants were asked to complete questions used to gather basic demographic information including gender, grade, and age.

Cognitive judgements.

Empathy and motivation to stop bullying. A desired change that is anticipated to come about as a result of the program is an increase in students' empathy that can lead to increased motivation and desire to intervene in bullying when they witness it occurring. Motivation and

empathy subscales were combined to create a larger, 11-item scale with items such as “I feel badly for students who are bullied by others” (empathy) and “I feel like I have the power to stop bullying” (motivation). Items related to empathy include numbers 1, 2, 3, 5, 8, and 11. The remaining items, numbers 4, 6, 7, 9, and 10 relate to motivation, with items 6 and 7 being reverse scored. All items were answered on a five-point scale with response options ranging from almost never to almost always. Possible scores may range from 6 to 30 for the empathy subscale and from 5 to 25 for the motivation subscale, with low scores indicating low levels of empathy and/or motivation. Pre and post-test alpha levels for each of the scales, for both divisions, are presented in Table 5.

Table 5

Alpha Levels for Empathy and Motivation to Stop Bullying

Subscale	Primary Division		Junior Division	
	Pre-test	Post-test	Pre-test	Post-test
Empathy	.65	.63	.65	.63
Motivation	.57	.64	.57	.64

Self-esteem and resiliency. This scale focuses on how students feel about themselves. One of the core objectives of the program is to increase students’ self-esteem through the recognition that everyone has different abilities, everyone matters, and everyone belongs. While this scale includes both self-esteem and resiliency items, the self-esteem portions (Items 1, 2, 4, 5, 7, 8, 9, 10, 11, 12, and 14) were taken from the Rosenberg Self-Esteem Scale (Rosenberg, 1965) with the language being adapted for use with this age group. The 10 items on this subscale, such as “I feel I am just as smart as other students” are answered on a five-point scale related to how often they feel a certain way with 1 being “almost never” and 5 being “almost always”. Items 2, 5, and 10 are reverse scored. Total scores can range from 11 to 55 with high scores indicating a high level of self-esteem and low scores indicating low levels of self-esteem.

The resiliency subscale includes items 3, 6, and 13, including questions such as “When I feel upset I try not to let it bother me for a long time. Items 3 and 6 are reverse scored. Total scores for this subscale range from 3 to 15, with higher scores indicating higher levels of resiliency while lower scores indicate lower levels of resiliency. All alpha values for both subscales are presented below in Table 6.

Table 6

Alpha Levels for Self-Esteem and Resiliency

Subscale	Primary Division		Junior Division	
	Pre-test	Post-test	Pre-test	Post-test
Self-Esteem	.84	.86	.82	.88
Resiliency	.28	.37	.31	.46

School climate. The School as Caring Community Profile II (SCCP-II) (Lickona, & Davidson, 2001) was adapted for the purposes of this study. The original 42 items on the scale were evaluated based on their appropriateness and fit with the expected outcomes of the study leaving 13 questions in the adapted scale. The 13 questions ask students to assess the frequency of specific behaviours, such as “Students treat others with respect”, on a five-point scale from almost never to almost always. Items 4, 7, 8, 10, and 12 are reverse-scored. The total score for the scale can range from 13 to 65, with low scores on the measure indicating a low sense of community while high scores indicate a stronger sense of community within the school. Reliability of this scale at pre-test was 0.81 for primary students and 0.86 for junior students. Alpha increased at post-test to 0.85 for primary students and to 0.88 for junior students.

Identifying behaviours. One of the major changes expected to result from both *One by One We Get Along* and the Power Within is an increase in awareness of what behaviours are considered acceptable or unacceptable. This scale was modified from a measure used in the Colorado Trust Student Survey used in an evaluation of Colorado’s Bullying Prevention

Initiative (Williams, 2009), with students in Grades 5 through 12. The 10 items on the scale can be divided into two subscales; six of the items represent negative behaviours such as “Ignore it when other students are being pushed around” while the remaining four items such as “Go tell and adult when another student is getting beaten up” represent the positive behaviour subscale. As such the scale was used to assess the acceptability of different aggressive behaviours as well as different helping behaviours. In total the scale contains ten items scored on a scale of 1 to 5, with 1 being “Really Wrong”, 4 being “Perfectly OK”. The positive behaviour subscale includes items 3, 6, 9, and 10, with total scores ranging from 4 to 20. The negative behaviour subscale includes items 1, 2, 4, 5, 7, 8, with total scores ranging from 6 to 30. For both subscales, low scores indicate that students believe these behaviours are not acceptable while high scores indicate that they are acceptable. Alpha levels for both subscales are presented in Table 7.

Table 7

Alpha Levels for Positive and Negative Behaviours

Subscale	Primary Division		Junior Division	
	Pre-test	Post-test	Pre-test	Post-test
Positive Behaviours	.61	.65	.71	.75
Negative Behaviours	.58	.56	.77	.77

Self-efficacy for defending behaviour. This scale is intended to measure the level of comfort that students feel in addressing bullying behaviour when they see it. Different from actually identifying which behaviours they use when they see someone being bullied, this scale is used to identify how easy or difficult particular interventions would be such as “Trying to make others stop bullying would be ...”. This nine item scale was created based on the original three item scale developed by Poyhonen, Juvonen, and Salmivalli (2010), which was found to have satisfactory internal consistency ($\alpha=.69$). Their scale was adapted to include additional

items that reflect some of the options presented in the reactions to bullying scale and in the program curriculum. As with the original measure, the response format is on a 4-point scale (1 = very difficult for me, 4 = very easy for me), with totals ranging from 9 to 36. Alpha for the scale as used in this study was 0.76 at pre-test and 0.80 at post-test for the primary students. Alpha for junior level students was 0.83 at pre-test and 0.82 at post-test. High scores on this measure indicate high levels of self-efficacy for defending behaviours while low scores are indicative of low self-efficacy.

Behavioural changes.

Reactions to bullying. Portions of the School Climate Survey were adapted to assess student reactions when they are being being bullied (target reactions) as well as when they see others being bullied (bystander reactions). Students were first asked to indicate whether or not they had been the target of bullying or had seen someone else being bullied in the two months prior to completing the scale. If they answered yes, students were asked to indicate the frequency with which they engaged in specific behaviours, such as “I did not do anything”, on a 5-point scale from always to never for each of the remaining questions. The scale assessing student reactions when they are being bullied has 12 items while the scale for student reactions when others are being bullied includes 13 items. Items for each of these scales were further broken down into the broader categories according to the First AID strategy taught to the students. For students who indicated that they had been bullied, the target reactions were broken down into inform, including items 2, 3, 4, 5, 6, and 7 with total scores ranging from 0 to 24. The second category, defend, includes items 1 and 9 with total scores ranging from 0 to 8. The final category for target intervention was negative intervention behaviours and includes items 8, 10, 11, and 12

with total scores ranging from 0 to 16. In all cases higher scores indicate an increase in the frequency of use of the identified behaviour. Alphas for the subscales are presented in Table 8.

Table 8

Alpha Levels for Target Interventions

Subscale	Primary Division		Junior Division	
	Pre-test	Post-test	Pre-test	Post-test
Inform	.814	.79	.82	.80
Defend	.20	.32	.60	.52
Negative Interventions	.42	.33	.30	.27

Responses to the bystander scale were similarly divided according to the First AID strategy and included assist, with items 8 and 12, with total scores ranging from 0 to 8. The second category of “inform” included items 2, 3, 4, 5, and 6 with total scores ranging from 0 to 20. Defending behaviours included items 7 and 10 with total scores ranging from 0 to 8. And the final category of negative interventions included items 1, 9, 11, and 13, with total scores ranging from 0 to 16. Once again, higher scores indicate an increase in the frequency of use of these behaviours. Alphas for each of the bystander interventions are presented in Table 9.

Table 9

Alpha Levels for Bystander Interventions

Subscale	Primary Division		Junior Division	
	Pre-test	Post-test	Pre-test	Post-test
Assist	.32	.52	.48	.53
Inform	.82	.82	.87	.84
Defend	.81	.68	.64	.83
Negative Interventions	.52	.45	.55	.56

Personal experiences with bullying. One scale was developed for this study in order to assess student experiences with various forms of bullying with the scale being repeated twice

with different wording in order to evaluate how often students are being targeted with aggressive behaviours, as well as how often they target others. The 12-item scale required students to indicate the frequency with which they have experienced specific behaviours (e.g., “Another student has made fun of you”) and how often they have engaged in these behaviours (e.g., “You have made fun of another student”) in the two months prior to data collection. Items were answered on a 5-point scale from 0 (it hasn’t happened) to 4 (several times a week). Each of the items were further divided into subscales according to the type of aggressive behaviour including cyber, which included items 7 and 9 with total scores ranging from 0 to 8. Verbal aggression included items 1, 2, and 4, with total scores ranging from 0 to 12. The social aggression subscale included items 5 and 10, with total scores ranging from 0 to 8. Physical aggression included items 3, 6 and 8, with total scores ranging from 0 to 12. Finally the threats and intimidation subscale included items 11 and 12 with total scores ranging from 0 to 8. For each of the subscales, higher scores indicate a higher frequency of use of, or being targeted by, the identified behaviours.

Alpha for primary level students for the aggressive behaviour scale was 0.73 at pre-test and 0.85 at post-test, while it was 0.91 at pre-test and 0.89 at post-test for the junior level students. Alpha for the scale on how students had been targeted was 0.93 at both pre- and post-tests for primary students and 0.86 at pre-test and 0.89 at post-test for junior level students.

Table 10

Alpha Levels for Target Experiences and Aggressor Behaviours

	Primary Division		Junior Division	
Subscale	Pre-test	Post-test	Pre-test	Post-test
Target Experiences				
Cyber	.84	.87	.50	.60
Verbal	.84	.89	.82	.94
Social	.77	.79	.61	.72
Physical	.80	.87	.71	.71
Threats and Intimidation	.78	.79	.70	.72
Aggressor Behaviours				
Cyber	.21	.18	.73	.83
Verbal	.59	.72	.84	.86
Social	.40	.69	.71	.62
Physical	.52	.71	.76	.72
Threats and Intimidation	.21	.38	.73	.60

Qualitative Component – Knowledge Acquisition

Design. The qualitative part of this study was designed to gain a better understanding of the program impacts and the use and understanding of program information. Although the main focus of the qualitative component of the study was on knowledge acquisition, responses were also used to answer research questions around behavioural responses to bullying situations, the long-term benefits of the program, and the benefits to using the program two years in a row.

Qualitative data were collected through questionnaire and focus group formats, depending on the needs of the participants. The questions used in this section were the same for all students and were created through discussions among the research team members. Questions about program outcomes were based upon the program logic model while those that focus on program experience and satisfaction were developed based on what was perceived as important information to gather and on the informal post-program surveys that are currently being used by

the John Howard Society WW. As with the quantitative measures, these questions were reviewed and discussed by all team members in order to ensure that each one was in line with the purposes of the evaluation and added value to the operation of the program.

Procedure. During the post-test sessions, students who received programming were asked to complete additional questions which were being given to them along with the post-test questionnaire. In order to collect these data, a focus group format was used with primary level students, reducing the need for written responses, while junior level students were asked to respond to the questions in writing. Junior level students were given the qualitative questions as part of the post-test survey package and were asked to return the completed sheet to their envelope along with the completed quantitative questionnaire. Qualitative data collection took up to an additional 20 minutes for participants to complete. Students at schools that did not receive programming were only asked to complete the quantitative measures during the post-test period. The questions used to collect qualitative data can be found in Appendix D.

Questions. The qualitative questions were designed to determine how satisfied the students were with the program and to better understand the information and skills they retained following the end of programming in their schools, including how these skills and information have been used over the course of the year. The questions included in this section are as follows:

- 1) What did you like best about the program?;
- 2) What did you like least about the program?;
- 3) What are three things that you remember learning in the program?;
- 4) Have you needed to use any of the skills you learned in the program? If you have, tell me about a time you used these skills; and
- 5) What ideas do you have about how we could make the program even better?

Case Study

The final component to outcome evaluation involved a case study conducted with students from School A and School B. This portion of the study was used to specifically address questions around the long-term benefits of the program and the benefits to running the program a second year in a row in the same school. Data for the case study section were obtained through the quantitative and qualitative procedures outlined above. The only difference in the procedure was that students at School B, who served as a comparison site for School A, were also asked to complete the qualitative section in order to determine what they remembered more than one year after programming had been completed at that school.

Staff Data Collection

This portion of the study focused on how school staff perceives the culture of their school around bullying and how they respond to bullying when it occurs.

Procedure. During the testing sessions for staff scheduled in May and June, all staff at schools that used the programming were asked to respond to questions on their overall impressions of the program and provide qualitative feedback around the program itself and the changes that they have seen in their schools following program implementation. While all school staff members were eligible to respond to the survey (see Appendix E), all of the 18 respondents who chose to participate in this component of the study were teachers.

Demographic information. Participants were asked to complete questions used to gather demographic information including position within the school, grade level taught if the person is a teacher, and gender.

Satisfaction items. Staff members at schools with JHS WW programming were asked to respond to some additional quantitative items related directly to their experience with the

program. Staff were asked to indicate how often they attended program sessions with their class, if they would encourage others to use this program and if they would be willing to have it in their class again. Finally, staff were asked to rate their satisfaction with the program using a 7 item scale with items such as “Communicating on the student’s level” being rated on a 5 point scale from unacceptable to excellent. Total scores on the section ranged from 7 to 35 with low scores indicating low levels of satisfaction while high scores indicate high levels of satisfaction with the program.

Qualitative responses. All of the questions on the survey included an optional written portion immediately following the quantitative response. Staff at schools that received programming were also asked to answer the following questions related to program experience and satisfaction: 1) What are some of the changes you have seen because of the program? For example, children’s ability to identify bullying, use of program specific language, increase in appropriate reporting, ability to respond to bullying, changes in the culture of the school etc. a) in your students, b) in yourself, c) in your school; 2) What are some of the biggest benefits of the program a) for your students b) for yourself, c) for your school?; 3) What ideas do you have about how the program could be improved?; and 4) What other thoughts or opinions do you have about the program? Table 11 includes a brief outline of each of the evaluation components used to address these research questions.

Table 11

Outline of Components Used to Address Research Questions

Broad Research Question	Participants	Study Component
Cognitive judgements	Students Staff	Quantitative Data Qualitative Data
Rates of bullying	Students	Quantitative Data
Behavioural changes	Students Staff	Quantitative Data Qualitative Data
Knowledge acquisition	Students Staff	Qualitative Data
Long-term benefits	Students	Case Study Quantitative Data Qualitative Data
Two years of programming	Students	Case Study Quantitative Data Qualitative Data
Program impressions	Students Staff	Qualitative Data

Chapter 5 - Results

The results for this dissertation will be organized according to the research question being answered and will further be divided according to program level. Three initial sections will be presented with a focus on cognitive judgements, behavioural changes, and knowledge acquisition. Each section will include a discussion of the findings for first the primary level of programming (*One by One We Get Along*) and then for the junior level of programming (*The Power Within*). Following these sections, results will be presented from the case study schools which assess the possible long-term impacts of the program. Data from school staff will then be presented. Finally, this section will include reflections provided by students and staff on their overall impressions of the program and their suggestions for program improvements.

Cognitive Judgements

Assessment of changes on major program outcomes focusing on affective and cognitive judgements for both the primary and junior divisions of the program aims to answer the first major research question: *To what extent does the program affect the cognitive judgements students make of self and others with respect to bullying situations?* In order to determine if the average change in these program outcomes from pre- to post-test differed significantly between the two groups, data were analyzed using a three-way mixed analysis of variance. The two time periods (pre- and post-test) were the within subjects factor while group (intervention and comparison), as well as gender, were the between subject factors. In the following sections, main effects for the independent variables will not be reported; only interactions involving group and time will be discussed as these are the effects that inform us about the impact of the program. Alpha was set at 0.05 for all tests. However in order to control for Type 1 errors, and adjusted for familywise error, data were also analyzed with alpha adjusted to 0.006.

The following measures will be discussed in this section: empathy, motivation to stop bullying, self-esteem, school climate, identification of prosocial and negative behaviours, and self-efficacy for intervening in situations where aggressive behaviour is occurring. Given the low alpha for the resiliency scale, data for this construct were not analyzed and will not be presented in the following section. Major changes were seen in students from both primary and junior divisions and Table 12 provides a more complete picture of the results for each of these measures including analyses of the simple effects for each section. The results discussed in detail below focus on the interaction effects occurring in the intervention and comparison groups over time.

Primary students. The mixed analysis of variance revealed several significant interactions following the program period. To begin, a significant group x time interaction, $F(1, 152) = 8.583, p = 0.004$ (partial $\eta^2 = .053$) was found for levels of motivation. An analysis of the simple effects found that students in the intervention group showed a significant improvement in their levels of motivation ($t(75) = 2.825, p = 0.006$, Cohen's $d = 0.41$), while no change was found in the comparison sites. A significant group by time interaction was also found for students' ability to identify pro-social or helpful behaviours, $F(1, 148) = 8.641, p = 0.004$ (partial $\eta^2 = .055$). Simple effects analyses revealed that both the intervention ($t(73) = 5.893, p = 0.00, \text{Cohen's } d = 0.86$) and the comparison ($t(77) = 1.93, p = 0.06, \text{Cohen's } d = 0.25$) groups had significant, or marginally significant, increases in this area, although the intervention group changes were much greater. A third group by time interaction was found with respect to levels of self-efficacy for defending peers who were being targeted ($F(1, 146) = 4.22, p = 0.04$, partial $\eta^2 = .028$) with intervention group scores increasing by post-test ($t(75) = 2.356, p = 0.02, \text{Cohen's } d = 0.33$) while comparison group scores remained the same. Additional pre-post simple effects were found in some of the variables that were tested. Students

who received the *One by One We Get Along* program reported significant increases in empathy ($t(75) = 2.138$, $p = 0.04$, Cohen's $d = 0.29$) and school climate ($t(74) = 2.157$, $p = 0.03$, Cohen's $d = 0.22$), as well as a decrease in identifying negative behaviours as acceptable ($t(74) = 2.838$, $p = 0.01$, Cohen's $d = 0.36$), while similar changes were not found in the comparison sites. Finally, although self-esteem did not change at the intervention sites, a significant increase was found for the comparison groups ($t(76) = 3.083$, $p = 0.00$, Cohen's $d = 0.29$).

Junior students. Several changes were also seen in students in the junior division who received *The Power Within* program, with significant results being found for the majority of outcome measures. The first result of note was a significant group by time interaction in empathy for people who are being targeted by others $F(1, 158) = 10.68$, $p = 0.00$ (partial ETA squared = .063). Specifically, an increase in these scores was found for intervention students ($t(58) = 2.161$, $p = 0.04$, Cohen's $d = 0.35$) while these scores decreased in the comparison groups ($t(102) = 2.643$, $p = 0.01$, Cohen's $d = 0.27$). Of further note, this measure is the only one in which significant three-way interaction effect between gender and program status and time was found ($F(1, 155) = 4.21$, $p = 0.04$, partial ETA squared = .026). While girls in both groups had similar pre-test scores, by post-test girls in the intervention sites showed the greatest increase in empathy scores (29.88 to 32.03) ($t(31) = 3.828$, $p = .00$, Cohen's $d = 0.72$) while girls in the comparison group had the greatest decrease (30.75 to 29.20) ($t(55) = 2.862$, $p = .01$, Cohen's $d = 0.42$). Levels of motivation to stop bullying, which yielded significant changes in the primary division, also yielded a significant group x time interaction within the junior division ($F(1, 156) = 14.58$, $p = 0.00$, partial ETA squared = .085), with students at intervention sites reporting an increase in level of motivation ($t(56) = 2.201$, $p = 0.03$, Cohen's $d = 0.33$) while data from students at the comparison sites revealed decreases in these scores ($t(102) = 3.451$, $p = 0.00$, Cohen's $d = 0.33$).

The third major finding is with regards to changes in the overall school climate as it is perceived by the students. This measure yielded a significant group x time interaction ($F(1, 155) = 21.84$, $p=0.00$, partial ETA squared = .124), with students in the intervention site showing increases in their scores ($t(59) = 2.905$, $p = 0.01$, Cohen's $d = 0.38$) while children in the comparison sites reported a decrease in their scores ($t(98) = 3.664$, $p = 0.00$, Cohen's $d = 0.28$). While significant changes were not found in the ability of students to identify pro-social behaviours, there was a significant group x time interaction for their ability to identify negative behaviours, $F(1, 156) = 5.39$, $p=0.02$, partial ETA squared = .033. Although no significant simple effects were found, the patterning of means suggests that intervention students were less likely to endorse negative behaviours as acceptable while comparison students were more likely to endorse these same behaviours. The final significant finding in this section of data is for group x time levels of self-efficacy for defending a person who is being targeted $F(1, 151) = 26.81$, $p=0.00$ (partial ETA squared = .151). Here, students in the intervention sites scored higher on the self-efficacy measure at post-test than they had at pre-test ($t(57) = 4.798$, $p = 0.00$, Cohen's $d = 0.74$) while students from the comparison sites reported no significant change in self-efficacy.

Overall, data indicate that students in the junior division of the program had the greatest gains following the program both in terms of the number of changes that occurred and the significance of these changes. Motivation to stop bullying and self-efficacy in doing so were the only two measures that overlapped between the two groups and while significance levels for motivation were the same across groups, junior level students reported more significant changes in self-efficacy than did the primary level students. In looking at the differences between groups, only students at the primary level reported changes in their ability to recognize pro-social

behaviours, while changes in empathy, school climate, and ability to identify negative behaviours only occurred within the junior division of the program.

Table 12

ANOVA Results and Simple Effects for Cognitive Judgements

Measures	Group	Primary Division					Junior Division				
		Pre-test	Post-test	ANOVA			Pre-test	Post-test	ANOVA		
				I/CxT	GxT	I/CxGxT			I/CxT	GxT	I/CxGxT
Empathy	I	29.25	30.37	F(1,152)	F(1,152)	F(1,152)	29.12	30.53	F(1,158)	F(1,158)	F(1,158)
	C	30.00	30.15	=1.974	=0.390	=0.003	30.17	29.17	=10.675**	=0.009	=4.219*
Motivation	I	15.90	17.13	F(1,152)	F(1,152)	F(1,152)	14.91	15.95	F(1,156)	F(1,156)	F(1,156)
	C	16.29	15.75	=8.583**	=2.785	=0.826	15.44	14.53	=14.576**	=0.152	=0.532
Self Esteem	I	39.36	40.96	F(1,147)	F(1,147)	F(1,147)	37.75	37.73	F(1,145)	F(1,145)	F(1,145)
	C	37.21	39.29	=0.717	=1.858	=1.445	37.20	36.85	=0.084	=0.337	=0.043
School Climate	I	46.67	48.69	F(1,146)	F(1,146)	F(1,146)	43.70	46.75	F(1,155)	F(1,155)	F(1,155)
	C	46.87	48.03	=0.257	=3.029	=0.623	45.71	43.16	=21.843**	=3.228	=0.050
Pro-Social Behaviours	I	12.78	14.47	F(1,148)	F(1,148)	F(1,148)	13.70	13.95	F(1,158)	F(1,158)	F(1,158)
	C	13.09	13.60	=8.641**	=0.074	=0.980	13.56	13.76	=0.015	=0.386	=0.136
Negative Behaviours	I	7.09	6.61	F(1,149)	F(1,149)	F(1,149)	7.95	7.28	F(1,156)	F(1,156)	F(1,156)
	C	7.19	7.08	=1.334	=4.189*	=0.048	7.29	7.47	=5.390*	=3.500	=1.228
Self-efficacy	I	25.80	27.72	F(1,146)	F(1,146)	F(1,146)	23.09	27.08	F(1,151)	F(1,151)	F(1,151)
	C	28.05	27.85	=4.223*	=0.350	=1.491	26.71	26.23	=26.812**	=0.071	=0.444

*p < 0.05

**p < 0.007 using familywise error

Significant pre-post differences within the intervention and comparison groups are indicated by the bolded numbers

I = Intervention

C = Comparison

I/CxT = Intervention and comparison by time

GxT = Gender by time

I/CxGxT = Intervention and comparison by gender by time

Behavioural Changes

The second focus of this evaluation was to determine the impact of the program on behaviour, answering a number of major research questions. Prior to determining changes in the use of specific behaviours, students were asked to report whether or not they had seen someone being bullied within the two months prior to the completing the survey, answering the second research question: *To what extent does the program impact overall rates of bullying?* Data for primary students show that 47.1% (n=40) of students at intervention sites, compared to 35.3 (n=30) students at the comparison sites had witnessed bullying prior to the pre-test period. By post-test 28.6% (n= 22) of students at intervention sites and 42.5% (n=34) of students at comparison sites reported seeing someone else being bullied. Chi-Square analyses were conducted on the difference between groups at both pre-test and post-test. Analysis of the pre-test data did not reveal a significant difference between groups; however analysis on the post-test data revealed a marginally significant difference ($\chi^2(1, N = 157) = 3.317, p = .0069$) between the intervention and comparison groups. Further analysis of the difference within groups, from pre- to post-test were conducted using McNemar's test. For students who received the primary division of program there was a significant change in the number of participants who reported seeing someone else being bullied from pre- to post-test ($p = .011$). Specifically, 20 students who had originally reported witnessing bullying at the pre-test indicated that they had not seen anyone being bullied prior to the post-test period. Further, six students who had indicated that they had not seen anyone being bullied at post-test indicated that they had witnessed bullying by the post-test period. The same analysis on within group differences for students who did not receive the program did not reveal any significant pre-post changes.

Data from the junior students also revealed differences in witnessing bullying for students who received the program. At pre-test, 68.2% (n=45) of intervention site students and 42.9% of comparison site students had seen someone being targeted, with Chi-Square analysis indicating that this difference was significant ($\chi^2(1, N = 178) = 10.675, p = .001$). By post-test these rates dropped to 34.4% (n=21) for students at intervention schools, while they increased to 48.5% (n=50) at the comparison sites. Chi-Square analyses on the post-test data revealed that these difference were no longer significant ($\chi^2(1, N = 164) = 3.110, p = .078$). McNemar's test was once again used to assess within group differences, with the analysis indicating that the change from pre- to post-test was significant for the intervention sites ($p = .000$) with 20 students who had previously indicated that they had witnessed someone being bullied reporting that they had not seen someone being targeted by post-test, while no students who had previously reported seeing bullying at pre-test indicating that they had witnessed bullying by post-test. Analysis on pre- to post-test changes for students at the comparison sites revealed no significant differences.

A second question asked students to indicate whether or not they had been targeted within the past two months. At pre-test, 35.3% (n=29) of primary level students at the intervention sites and 35.3% (n= 30) of primary level students at the comparison sites reported being targeted. Data from the post-test period show a decline in rates of bullying at the intervention sites to 19.5% (n=15), while there was an increase in the comparison group to 38.8% (n=31). Chi-Square analysis revealed that, while the pre-test scores between groups were not significantly different, differences in post-test scores were significant ($\chi^2(1, N = 157) = 7.033, p = .008$). McNemar's test, conducted on within groups data, revealed that there were no significant pre- post- changes for the comparison groups; however the difference between the two time periods was significant for people who had received the program ($p = .043$).

Specifically, 18 students who had reported being targeted at the pre-test period no longer indicated that they had been bullied by post-test, while 7 students who had previously reported that they had not been bullied indicated that they had been targeted within the two months prior to the post-test period.

Similar changes were again noted for the junior level students. At pre-test 54.5% (n=36) of students at the intervention sites and 33.0% (n=37) of students at the comparison sites reported being bullied. By the post-test period, reports of bullying at the intervention schools fell to 23.0% (n=14) and increased to 44.1% (n=45) in the comparison group. Overall, Chi-Square analyses revealed that the number of participants that were bullied differed significantly by program/non-program group membership at both the pre ($\chi^2(1, N = 178) = 7.942, p = .005$) and post-test periods ($\chi^2(1, N = 163) = 7.405, p = .007$). Within groups differences were once again assessed using McNemar's test with no significant pre-post differences found for the comparison sites while a significant difference was found for the intervention group ($p = .001$). Specifically, 23 students who had indicated that they had been bullied prior to the pre-test period stated that they had not been bullied prior to the post-test, while only 4 students who had indicated that they had not been targeted at pre-test noted that they had been bullied by the post-test period. As such, there was a dramatic decline in both reports of witnessing bullying and of being targeted by others at the intervention schools while these same reports increased in schools where the program was not implemented.

The second area of focus for behavioural change aims to answer the third major research question set out for this study: *To what extent does the program impact behavioural responses with respect to how students respond to bullying either as a bystander or a target of bullying?* Data for this section only includes the students who indicated that they had witnessed bullying or

had been the target of bullying within the two months prior to taking the survey. Data were analyzed for the frequency of use for the behaviour and only includes students who reported using a behaviour at least half of the time that bullying occurred.

Intervention Behaviours

Data for intervention behaviours were analyzed in two different ways for both bystander and target interventions. First, mixed ANOVAs were conducted on data from all participants who indicated that they had seen or experienced bullying behaviour at *both* the pre- and post-test periods. These results are presented for specific groupings of behaviour type. Second, descriptive data for individual response options provide the changes in the percentage of students who indicated that they engaged in each of these response options. Here, students who indicated that they had seen or experienced bullying behaviour at *either* the pre- or post-test periods were included in the analyses.

Bystander responses. Students receiving either level of the program are taught to intervene assertively in bullying situations through the use of a “First Aid” strategy in which they are to **assist**, **inform**, or **defend** when someone is being targeted. The program also helps students to identify and reduce their use of negative interventions for bullying. ANOVA results for these data are presented in Table 13.

Table 13

ANOVA Results and Simple Effects for Bystander Interventions

Measures	Groups	Primary Division			Junior Division		
		Pre-test	Post-test	Group x Time	Pre-test	Post-test	Group x Time
Assist	I	5.07	4.71	F(1,31)	4.33	4.38	F(1,50)
	C	4.42	5.05	=1.330	4.35	3.74	=1.532
Inform	I	12.33	11.4	F(1,29)	8.61	9.38	F(1,49)
	C	11.81	10.38	=0.054	8.37	7.13	=1.858
Defend	I	4.88	5.06	F(1,31)	4.90	4.76	F(1,51)
	C	4.94	5.00	=0.013	4.97	4.03	=1.887
Negative Interventions	I	4.81	2.81	F(1,33)	4.04	3.14	F(1,51)
	C	3.79	2.84	= 0.607	4.19	3.94	=0.588

I = Intervention

C = Comparison

Significant pre-post differences within the intervention and comparison groups are indicated by the bolded numbers

Primary students. Mixed ANOVA analyses for data from students in the primary division did not yield significant results for any of the First Aid response categories. A further look at the simple effects for each of these categories also failed to reveal any significant changes in behavioural patterns when students were acting as bystanders to a bullying situation. For information purposes, the percentage of people using individual behaviours at both the pre- and post-test periods can be found in a table in Appendix F.

Junior Students. As with the primary students, mixed ANOVAs did not reveal any significant changes in bystander responses with respect to the First AID categories. There were, however, some differences in terms of the pre-post simple effects for these groupings. In particular, it was found that there were decreases in comparison group scores on both the Assist ($t(30) = 1.914$, $p = .07$, Cohen's $d = 0.31$) and Defend ($t(31) = 2.720$, $p = .01$, Cohen's $d = 0.48$) categories while data from the intervention groups revealed no changes in these areas over the school year. As with the primary age students, data on the percentage of junior level student's use of specific behaviours is presented in a table found in Appendix G.

Although no significant group by time differences exist in the broader categories bystander interventions, there are some promising results. Data from junior level students provided some significant changes with respect to simple effects in some of these behaviour categories. Further, proportions of specific behaviours being used present consistent trends in the desired directions. This, combined with the changes in cognitive judgements lends support for the effectiveness of the program, particularly for the junior level students.

Target responses. In addition to being taught how to help others when they are being targeted, students are taught how to help themselves when they are being bullied. Generally, these assertive behaviours fall into the categories of informing someone or defending themselves. Negative interventions, either passive or aggressive, are again discouraged and replaced with positive behaviours. ANOVA results for this data are presented in Table 14.

Table 14

ANOVA Results and Simple Effects for Target Interventions

Measures	Group	Primary Division			Junior Division		
		Pre-test	Post-test	Group x Time	Pre-test	Post-test	Group x Time
Inform	I	12.50	9.50	F(1,21)	8.20	11.20	F(1,31)
	C	11.13	12.00	= 2.069	8.95	7.61	= 3.007
Defend	I	4.38	5.38	F(1,23)	3.50	5.10	F(1,31)
	C	5.00	4.76	= 1.479	4.35	4.29	= 3.448~
Negative Interventions	I	4.38	3.61	F(1,23)	5.60	3.60	F(1,32)
	C	2.12	3.29	= 1.773	4.84	5.07	= 5.856*

I = Intervention

C = Comparison

*p< 0.05

~p<1.0

Significant pre-post differences within the intervention and comparison groups are indicated by the bolded numbers

Primary students. Through the program, students were taught several different skills that could be used in helping themselves if they were being targeted. A mixed ANOVA revealed no significant changes at the primary level in any of the broader behavioural categories assessed in

the evaluation. Analysis of the simple effects for each of these categories also revealed no significant changes from pre- to post-test for either the intervention or comparison groups.

Percentages of youth engaging in each of the behaviours making up these categories, at both pre- and post-test, are presented in a table in Appendix H, with overall patterns of behaviour being in the desired direction for the youth from the intervention sites

Junior students. The mixed ANOVA conducted on data from the junior division students shows a marginally significant group by time interaction for defending behaviours ($F(1,31) = 3.448, p = 0.07$, partial $\eta^2 = .100$). Simple effects from pre- to post-test revealed that students at the intervention sites were significantly more likely to defend themselves when they were being targeted ($t(9) = 2.588, p = 0.03$, Cohen's $d = 1.08$), while no change was reported in comparison site scores. A significant group by time interaction was also found for the use of negative intervention skills (i.e., getting back at the person later) when an individual is being targeted ($F(1,32) = 5.856, p = 0.02$, partial $\eta^2 = .155$). While analysis of simple effects found no significant pre- post- changes, the general trend in scores indicates that students from the intervention sites were less likely to use negative intervention skills at post-test than they had been at pre-test, while students from the comparison sites reported increases in these behaviours. In addition to the tests of significance, the overall pattern of use for individual behaviours is consistent with the changes that were expected to occur following the program. Information on the percentages of people engaging in these individual behaviours at both pre- and post-test are presented in a table in Appendix I.

As with previous data, it appears that the junior level students benefited more from the program than did the primary level students, as indicated by the number of significant group by time and simple effect analyses. Further, in both the primary and junior groups simple effects

were noted in the desired direction for individual behaviours while students at the comparison sites reported changes in the opposite direction, even when the group by time interactions were not significant.

Aggressive Behaviours

The third focus of behavioural change was around reports of bullying behaviours, either as an aggressor or as a target of bullying, answering the fourth research question: *To what extent does the program impact the degree to which students engage in or are the target of various aggressive behaviours?* In this section of the survey, all students were asked to respond to the items, regardless of whether they felt that they had bullied others or had been the target of bullying. As with the intervention behaviours, data on the use and experience of aggressive behaviours are also presented here in two ways. First, data were analyzed for significant changes from pre-test to post-test through a mixed ANOVA. Second, descriptive data for each of the individual types of aggressive behaviour are presented in the appendices and include the frequency with which the behaviours were reported. This data is presented to include any responses indicating that a behaviour had occurred at least once or twice in the two months prior to completing the survey. The threshold for analyzing responses was set low because bullying does not generally take on one form; rather students are more likely to engage in, or experience a variety of bullying behaviours. Data in the table are organized based on the forms of bullying students are taught about during the program period.

Aggressor responses.

This section focuses on the use of various aggressive behaviours by a student against another student. Participants were asked to identify how frequently they had engaged in each of the individual behaviours. ANOVA results for this data are presented in Table 15.

Table 15

ANOVA Results and Simple Effects for Aggressor Response

Measures	Group	Primary Division			Junior Division		
		Pre-test	Post-test	Group x Time	Pre-test	Post-test	Group x Time
Cyber Bullying	I	0.04	0.03	F(1,152)	0.25	0.20	F(1,157)
	C	0.04	0.09	= 0.996	0.33	0.39	= 0.627
Verbal Bullying	I	0.62	0.51	F(1,151)	1.28	0.12	F(1,153)
	C	0.85	0.99	= 0.834	1.72	2.27	= 3.004~
Social Bullying	I	0.25	0.21	F(1,152)	0.72	0.59	F(1,154)
	C	0.64	0.53	= 0.479	0.60	0.82	= 1.778
Physical Bullying	I	0.71	0.42	F(1,152)	0.97	1.18	F(1,156)
	C	0.69	0.79	= 3.997*	1.39	1.48	= 0.000
Threats and Intimidation	I	0.17	0.16	F(1,152)	0.45	0.20	F(1,153)
	C	0.37	0.32	= 0.149	0.26	0.29	= 3.514~

I = Intervention

C = Comparison

* $p < 0.05$ ~ $p < .10$

Significant pre-post differences within the intervention and comparison groups are indicated by the bolded numbers

Primary students. At the primary level, a statistically significant group x time interaction was found in the decrease in the use of physical aggression against another student $F(1,152) = 3.997$, $p = 0.05$, partial ETA squared = .026), with fewer students at the intervention sites indicating that they engaged in this behaviour at post-test than they had at pre-test ($t(76) = 1.806$, $p = 0.07$, Cohen's $d = 0.26$) while students at the comparison sites reported no significant changes in these same behaviours. Data on the percentage of youth who engaged in each of these behaviours at pre- or post-test are presented in a table in Appendix J.

Junior students. A mixed ANOVA revealed a marginally significant group by time interaction in verbal bullying ($F(1,153) = 3.004$, $p = 0.08$, partial ETA squared = .019). Although no significant pre- post- changes were found, the general trend indicates that the use of verbal bullying was increasing at comparison sites while it was decreasing at the intervention sites. Further, a marginally significant group by time interaction was found for the use of threats

and intimidation ($F(1,153) = 3.514, p = 0.06$, partial $\eta^2 = .022$). Once again, no significant simple effects were found, although the trend showed an increase in the use of threats and intimidation at the comparison sites while rates at the intervention sites were beginning to decrease. Data on the percentage of participants engaging in these individual behaviours that make up these categories can be found in a table in Appendix K. Overall, the results here are once again in-line with the focus of the program this year, as more time was spent discussing the different forms of verbal and social bullying, where rates either decreased slightly or were maintained, while physical bullying was not discussed to the same extent and was the only area in which an increase in behaviours was found.

Target responses.

This section focuses on the frequency with which students reported experiencing, or being targeted by, various forms of aggressive behaviours. As with the previous section, participants were asked to identify how frequently they experienced each of the individual behaviours. ANOVA results for this data are presented in Table 16, while data on the percentage of participants reporting experiencing the specific behaviours that are included in these categories are presented in Appendix K.

Table 16

ANOVA Results and Simple Effects for Target Responses

Measures	Groups	Primary Division			Junior Division		
		Pre-test	Post-test	Group x Time	Pre-test	Post-test	Group x Time
Cyber Bullying	I	0.41	0.21	F(1,149)	0.26	0.21	F(1,155)
	C	0.22	0.18	= 1.091	0.43	0.52	= 0.803
Verbal Bullying	I	2.79	1.85	F(1,148)	2.90	2.66	F(1,154)
	C	3.00	2.87	= 2.123	2.49	3.90	= 11.020**
Social Bullying	I	1.40	1.16	F(1,145)	1.56	1.13	F(1,156)
	C	1.66	1.45	= 0.013	1.31	1.54	= 3.686~
Physical Bullying	I	2.55	1.81	F(1,148)	1.67	1.38	F(1,154)
	C	2.55	2.29	= 1.087	1.67	2.50	= 6.179**
Threats and Intimidation	I	1.56	1.19	F(1,149)	1.02	0.70	F(1,157)
	C	2.13	1.37	= 1.102	1.03	1.15	= 2.252

I = Intervention

C = Comparison

**p<.01

~p<.10

Significant pre-post differences within the intervention and comparison groups are indicated by the bolded numbers

Primary students. Finally, behavioural changes were assessed through student reports of being targeted by others. ANOVAs on each of the five forms of bullying addressed through the program reveal no significant effects with regard to the frequency with which students experienced these forms of aggression. Analysis of the simple effects of each of these forms of bullying revealed significant decreases for various forms of bullying for both the intervention and comparison sites. At the intervention sites, it was found that students were less likely to be targeted by verbal bullying ($t(74) = 2.430$, $p = 0.02$, Cohen's $d = .31$). Further, simple effects for the intervention group were found for physical bullying, with students at these sites reporting a decrease in experiencing a variety of physical forms of aggression ($t(74) = 2.345$, $p = 0.02$, Cohen's $d = 0.25$). Simple effects on the scores for the comparison students only revealed a change in the broader category of threats and intimidation ($t(75) = 2.779$, $p = 0.01$, Cohen's $d = 0.35$), with rates of these behaviours decreasing from pre- to post-test.

Junior students. Mixed ANOVAs revealed several significant group x time interactions for the broader categories of bullying behaviours. To begin, a significant group by time interaction was found in verbal bullying ($F(1,154) = 11.020, p = 0.00$, partial ETA squared = .067), with simple effects indicating that there was a significant increase in being targeted in this way at the comparison sites ($t(94) = 4.537, p = 0.00$, Cohen's $d = 0.41$), while these rates remained stable at the intervention sites. A marginally significant group by time interaction was also seen in reports of social bullying ($F(1,156) = 3.686, p = 0.06$, partial ETA squared = .023). While no simple effects were found for either group, the general trend indicates that rates of social bullying were decreasing in the intervention group and increasing at the comparison sites. Finally, a significant group by time interaction was found for physical bullying ($F(1,154) = 6.179, p = 0.01$, partial ETA squared = .039), with rates increasing at the comparison sites ($t(95) = 4.537, p = 0.00$, Cohen's $d = 0.41$) while no significant change was found for the intervention group.

Knowledge Acquisition

Knowledge acquisition was assessed in order to respond to the fifth research question identified for this study: *What program concepts and skills do students remember following program delivery?* During the post-test period, students were asked to respond to a series of qualitative questions in which they were able to describe the components of the program that they remembered learning. As previously noted in the methods section, primary level students participated in an informal focus group, responding orally to the questions, while junior level students were asked to respond to the same questions in written format.

Primary students. At the primary level, students recalled using pictures to identify if a person was someone who might bully another student. One participant said that she remembered this because it taught her that you “can’t tell if someone is a bully just by looking at them”. Students also learned how to identify if someone was being bullied or not, based on the criteria for bullying behaviour – that it be repeated, intentional, and hurtful. Students discussed using examples of scenarios to decide if a behaviour was bullying or just inappropriate:

I like how she asked us about things and we had to guess if people were bullied or not bullied. I liked that because there were some people that I have seen like that – I could relate to that. And some things I thought were bullying but weren’t. It was just mean but not always bullying.

In discussing bullying behaviours, several junior division participants mentioned learning some of the reasons a person might choose to bully someone else. In particular they discussed the concept of the power jar, noting that people bully because their jar is cracked causing them to lose power so they feel the need to bully someone in order to feel powerful. They also noted that

hurting another person will not fix a person's power jar. Other primary division students remembered learning about the Bully Bug that encourages people to bully others:

I remember the Bully Bug. She said you can't let it get you. The bully bug is a little creature that lives inside your ear and tells you bad things to do and every time you do something nice it grows smaller and gets ugly and if you do something bad it grows bigger and cuter. Because he's trying to be cute when you're mean so you want to be mean. Everyone has their own bully bug and you don't want one. If the bully bug is ugly you want to get rid of it so you're not mean to other people.

Students also discussed some of the strategies and skills they had learned that could be used in order to effectively intervene in a bullying situation or defend themselves if they were targeted. Students in younger grades often incorrectly report small incidents of misbehaviour to their teachers or principals. As a result the program teaches students to remember the difference between bullying and a single inappropriate act of aggression. This lesson was also remembered clearly as students mentioned being told to wait until they were sure a situation counted as bullying:

Somebody said they would play with me but then they didn't and that was one strike so I saw they were building a fort without me so I asked why I couldn't join and they said because you can't. Then after three strikes I told the teacher. Before I would have gotten sad and just walked away and not used those skills.

Another major program concept that primary students readily identified were the passive, aggressive, and assertive behaviours taught through the characters of Sue the Blue, Fred the Red, and Hello Yellow. Participants remembered these characters and were able to clearly describe their different roles:

Fred the red, Sue the blue and Hello Yellow – Fred is the one that makes you be mean.

Sue wants to make other people feel happy and herself sad – so if you had something and someone else wanted it she would give it to them to make them happy and herself sad.

Hello is someone who would share stuff like Sue the Blue but wouldn't be sad. He would give half of the piece to the other person. Hello follows the rules and tells people the right thing to do. She also makes sure all her friends are happy and she is too. She or he would stand up if there was bullying happening.

Students then used these characters to describe how a person should stand up to someone who was targeting them or someone else, stating that they need to stand up straight and tell the person to stop without being angry, like Fred the Red, or acting afraid, like Sue the Blue.

In addition to talking about strategies that can be used to combat bullying, students indicated that they had learned several lessons on how to behave in general. They discussed the importance of being nice to everyone, even if they were not friends, of using the skills to help when they had disagreements with siblings or parents, and using some of the lessons to help themselves in difficult situations. The concept that most often was discussed when talking about applying the program outside of bullying situations was the TRY song. Some students indicated that it taught them to try harder to be nice to their siblings, while others stated that it encouraged them to try hard in everything they do, and another noted that she had used the song to help calm down when she was not getting her way. Participants also indicated that they felt better able to ignore small incidents of teasing that previously may have upset them.

A final question in the knowledge acquisition section also focused on the translation of knowledge into action as students were asked if they had ever used any of the skills taught in the program. Out of the students who responded to these questions, 16% of students stated that they

had not used any of the skills, often because they had not had the opportunity to do so, although when asked, they agreed that they would have been able to use them if they felt they needed to. While 20% were unsure or could not remember if they had used these skills or not, 64% of students reported that they had used at least one skill they had been taught. Participants provided some examples of times when they had used some of the strategies taught to defend themselves or others from using assertive behaviours:

I was at a waterpark and I was getting called names and then I finally told them to stop.

They stopped and said sorry. I looked into their eyes and said stop in the most way that I wanted them to know I wanted them to stop.

Students also reported occasions when they had used the skills taught through the program to help a friend: “When my friend was getting bullied he forgot the skills so I went up and said I don’t like what you’re doing and told them to stop.” Students also discussed helping defending others, and in one instance this behaviour was demonstrated by a student during data collection when some of the participants were claiming that another student had never intervened in a bullying situation. At that time, one participant used assertive behaviours to defend the other group member saying that it was likely that this other student had simply not had the opportunity to use those skills yet but that he was sure that he would if he had the chance to do so. Overall, most of the students at the primary level agreed that the program had helped them learn what they could do when they, or someone else, were being targeted, while prior to the program they had often been unsure of how to stop bullying from happening.

Junior students. Knowledge acquisition was also assessed for older students who received the junior level of the program. To begin, several of the participants who responded to these questions stated that they remembered the concept of a power jar and found it to be a very

helpful way of learning why people might bully others. Some students wrote about using the power jar in their own personal lives; for example one stated that they would be careful not to let their jar become cracked so that they would not bully others. Another student connected the concept of the power jar with resiliency: “I like the power jar because if someone is to bully me I would think about reinforcing my glass so it wouldn’t break”.

In addition to learning why people may choose to bully others, participants recalled learning about the criteria that behaviour needs to meet in order to be considered bullying. Nearly 45% of students mentioned the bully rap as being a key strategy they used to remember that bullying involves behaviours that are intentional, repeated, and hurtful. Further to discussions on what constitutes bullying, students recalled that they had learned about different types of bullying, with several students noting being able to name the five different types of bullying that are taught through the program. In particular, participants spoke about learning the information on cyber bullying as being both new to them and helpful. Many students stated that they had not previously been aware that information sent over the internet is not private and that it does not go away even after it has been deleted. Some students mentioned that this information helped them to make better decisions when using the internet.

Beyond being able to identify bullying when it happened, students felt that the program helped them to understand their own roles in bullying, particularly with respect to bystander behaviours. Several students recalled the different types of bystanders with one participant writing:

I learned that being a bystander doesn’t just mean you do nothing but watch. Some of them do but other bystanders can make things worse by bullying, too. You want to be the kind of bystander that helps people. I think it’s the firefighter.

Participants also noted that when they saw bullying happening it was important to get involved even if they were not friends with that person.

In addition to recognizing that they should intervene in bullying situations, participants stated that the program had provided them with the skills needed to address bullying. Several students at this level also recalled learning about the BLAST strategy, often noting that they felt it would be helpful and effective if they needed to intervene in a bullying situation. Three students specifically recalled what the acronym stood for:

I remember BLAST and that it tells us the steps to do if we are being bullied. We need to remember our Body language, Look into the person's eyes, put our Armor on, tell them to STOP and Tell someone, Tell someone!

Some students noted that it was important to only use three words to tell a person to stop because using more words would reduce the chances of the person listening to what they were saying.

Participants who received the junior program also connected the BLAST strategy with passive, aggressive, and assertive behaviours. In this level of programming these are referred to as being a gnome, a dragon, or a knight. Close to 60% of students made some reference to these characters in their responses, with many students accurately describing the role of each in a bullying situation.

The dragon fights back when they're hurt or sad. The gnome stays quiet and believes the thing the bully is saying. The knight protects the power jar, doesn't let the bully hurt his feelings, and uses BLAST and tells someone he trusts.

In discussing these characters and their associated behaviours, students also noted that they felt more prepared to respond to bullying, either in helping others or in helping themselves.

Students at this level were also asked whether or not they had used any of the skills taught in the program to help themselves or another person. The majority of people who responded to these questions, 53% were unsure about whether or not they had, while 26% indicated that they had not used any of the program skills. The remaining 21% stated that they had used at least one skill taught in the program such as telling an adult immediately, helping the person being bullied, or using the BLAST strategy with another student or with a sibling. One student shared an example of intervening in a bullying situation stating: “When this girl was telling people to call me names and she did it over and over again. So then I told her to STOP and went and told a teacher that I needed more help with this”. The most popular response involved using the BLAST strategy with several students stating that it worked well or that it worked for some people but not everyone. However, 10% of the students who indicated that they had used the BLAST strategy stated that while they had tried to tell the person to stop they found that it was ineffective and did not try it again.

Case Study Results

One of the major research goals of this project was to assess the long-term impact of programming on students who had previously received the program. Specifically this section of the study was designed to answer the sixth and seventh research questions: *What are the long-term impacts of the program one year after students receive it?* and *What are the benefits to running the program in the same school two years in a row?* In order to answer these questions, we selected two schools that had received programming the previous year and returned to one of the schools to deliver the program a second time. These schools were included in the original analyses conducted on data from the intervention and comparison sites, but will be presented separately here in order to answer the above research questions. School A will refer to the intervention site school that received the program two years in a row and School B will refer to the comparison site school in which a one-year follow up was conducted, with the school only receiving the program in the year prior to the evaluation. Table 17 contains a timeline for participation and data collection for all schools.

Table 17

Timeline for Participation and Data Collection

	Year Prior to the Evaluation	Fall of the Evaluation Year	Program Group	Spring of the Evaluation Year
Case Study Schools				
School A	Program	Follow up test	Program	Final post-test
School B	Program	Follow up test	No Program	Final post-test
Remaining Schools				
Intervention	No program	Pre-test	Program	Post-test
Comparison	No program	Pre-test	No Program	Post-test

One way ANOVAs were conducted to compare pre-test data from the schools where programming had not previously been used (schools other than School A and School B) and one-year follow up data from the two case study schools in order to determine if any difference between the two groups existed at the beginning of the study period. Overall, no significant differences were observed for any of scores on the cognitive judgement scales when the case study schools were compared with the other schools or when they were compared against one another. This was true of data from both the primary and junior level students. As a result, it appears that any difference in cognitive judgements that may have occurred following program implementation at the case study schools the year prior to this study were not retained long-term.

Cognitive Judgements

As with the cognitive judgement section for the larger groups, all data were analyzed using a mixed analysis of variance with the cognitive judgements including empathy, motivation to stop bullying, self-esteem, school climate, pro-social behaviours, negative behaviours, and self-efficacy as the dependent variables. The independent variables were school sites and time. While the previous sections include a pre-post design, the case study data was also analyzed using two different time points, although here the levels of time include the one year follow up data (collected at the same time as pre-test data for the other schools) and final post-test data (collected during the regular post-test period). Gender was not included in the analysis for the case study section. A summary of the results is found in Table 18.

Table 18

ANOVA Results and Simple Effects Case Study Cognitive Judgements

Measures	Group	Primary Division			Junior Division		
		One Year Follow Up	Final Post-test	Group x Time	One Year Follow Up	Final Post-test	Group x Time
Empathy	A	30.63	30.63	F(1, 63)	27.80	32.30	F(1, 32)
	B	30.18	29.68	= .213	32.04	29.96	= 10.731**
Motivation	A	16.74	16.86	F(1, 63)	14.40	16.50	F(1, 33)
	B	16.32	15.91	= .354	16.08	15.24	= 5.248*
Self Esteem	A	38.74	38.93	F(1, 61)	37.44	39.11	F(1, 29)
	B	34.85	39.25	= 5.846*	38.05	35.45	= 5.155*
School Climate	A	47.49	49.44	F(1, 61)	41.00	47.36	F(1, 32)
	B	45.95	46.75	= .291	42.70	39.21	= 7.527**
Pro-Social Behaviours	A	13.29	14.56	F(1, 61)	13.80	14.80	F(1, 33)
	B	12.68	13.05	= 1.738	14.32	14.40	= 1.233
Negative Behaviours	A	6.89	6.61	F(1, 61)	8.90	6.90	F(1, 32)
	B	6.77	6.86	= .606	6.50	7.30	= 5.088*
Self-efficacy	A	26.37	25.88	F(1, 62)	22.10	29.60	F(1, 30)
	B	28.57	28.19	= .004	28.14	28.34	= 7.972**

A = Intervention (two years of programming)

B = Comparison (one year of programming)

*p < 0.05

**significant at p < 0.01

Significant follow up post differences within the intervention and comparison groups are indicated by the bolded numbers

Primary students. Analyses of the cognitive judgements for the primary aged participants revealed only one significant group by time interaction with respect to self-esteem ($F(1, 61) = 5.846$, $p = 0.02$, partial $\eta^2 = .087$). Analysis of the simple effects revealed that while rates of self-esteem at School A remained the same, there was a significant increase in self-esteem at School B ($t(19) = 2.679$, $p = 0.02$, Cohen's $d = 0.5$). While no other interactions were found, a simple effect was found for students at the intervention site with regards to an increase in their ability to properly identify pro-social behaviours ($t(40) = 3.261$, $p = 0.00$, Cohen's $d = 0.67$) while a similar change was not found among students at the comparison school.

Junior students. Supporting previous findings that the program had the most significant impacts on students in the junior level, older students at School A reported gains on almost every outcome variable by the end of the study period. Specifically, there were significant group by time interactions found in levels of empathy ($F(1,30) = 10.731$, $p = 0.00$, partial ETA squared = .251), with simple effects indicating that empathy increased at School A ($t(9) = 2.363$, $p = 0.04$, Cohen's $d = 1.27$), and decreased at School B ($t(23) = 2.022$, $p = 0.05$, Cohen's $d = 0.57$). A further group by time interaction was found for motivation to help others ($F(1,31) = 5.248$, $p = 0.03$, partial ETA squared = .137) and while no significant simple effects were found, the overall trend indicates that levels of motivation were increasing in School A and decreasing in School B. Self-esteem was also found to have a significant group by time interaction ($F(1,27) = 5.108$, $p = 0.03$, partial ETA squared = .151), with results from School B indicating that there was a decrease in self-esteem among these students ($t(21) = 2.651$, $p = 0.02$ Cohen's $d = 0.3$). Analysis of data on school climate revealed a fourth group by time interaction ($F(1,30) = 8.139$, $p = 0.01$, partial ETA squared = .190), with data from School A, which received the program a second time, revealing gains in this area for the intervention students ($t(10) = 2.095$, $p = 0.06$, partial ETA squared = 0.86) while rates at School B were beginning to decrease, although not significantly. The ability to identify negative behaviours revealed a fifth significant group by time interaction $F(1, 32) = 5.088$, $p = 0.03$, partial ETA Squared = .137) with students from School B reporting an decrease in the ability to identify these behaviours (as noted by the increase in their means for this scale) ($t(23) = 2.632$, $p = .02$, Cohen's $d = 0.59$), while previous scores were maintained for the intervention site participants. Finally, analysis of self-efficacy for the use of defending behaviours revealed a significant group by time interaction ($F(1, 30) = 7.972$, $p = 0.01$, partial ETA squared = .210), with students from School A indicating that they

had higher levels of efficacy by post-test ($t(9) = 2.171$, $p = 0.06$, Cohen's $d = 1.07$), while rates of self-efficacy remained the same at School B.

In each of these outcomes, the changes seen were in the desired direction, with students at the school receiving programming for the second time reporting increases in each of the identified areas. Further, when compared to the other schools who received the program over the course of this study, data from School A yielded significant changes in more of the cognitive judgement scales than did intervention schools from the larger group. As such, while there is little evidence for the sustainability of the benefits of either level of programming, from one year to the next, there is evidence that students who received programming two years in a row benefit more than students who only received the program once.

Behavioural Changes

As the sample size for participants after being fractured into program level and intervention or comparison group was fairly small, data for questions related to behavioural changes were analyzed to compare all participants from School A with all participants from School B. Overall reports of bullying behaviour were assessed for the case study schools, both for witnessing bullying and for being a target of bullying. In looking at rates of youth seeing someone else being bullied, 39% ($n = 23$) of students at School A reported witnessing bullying at the follow-up test period, while 22% ($n = 12$) indicated that they had seen bullying occurring prior to the final post-test. Results for students at School B revealed that 49% ($n = 25$) of students witnessed bullying prior to the follow-up test and 35.3% ($n = 18$) had seen instances of bullying by the final post-test. Chi square analyses conducted on post-test data indicated that the differences between School A and School B were marginally significant, $\chi^2(1, N = 101) = 3.110$, $p = .078$. Further exploration to determine within subjects differences from the follow up

testing period to the final post-test was conducting using McNemar's test on each on both the intervention and comparison site participants. Results for School A revealed a significant change over time ($p = .013$) with 12 students who had originally witness bullying indicating that they had not seen other students being bullied by the final post-test period while only 2 students who had not previously seen bullying indicating that they had witnessed such behaviours prior to the final post-test. In comparison no significant changes were found in School B when follow up scores were compared to their final post-test scores.

The second area of exploration involved the number of students reporting that they had been targeted in the two month period before taking the survey. Data from School A indicated that 34% ($n = 20$) of students had been targeted prior to the follow-up test while 20% ($n = 11$) of students had been bullied prior to the final post-test. In comparison, 37% ($n = 19$) of students at School B had been targeted prior to the follow-up test while 40% ($n = 19$) reported being targeted prior to the final post-test. Chi square analyses revealed that the differences in personal experiences of bullying between the two schools were significant ($\chi^2(1, N = 101) = 4.840, p = .028$. at the post-test period. Once again, McNemar's test was used to assess within group differences, with results indicating that the follow-up to final post-test difference in scores for School A was marginally significant ($p = 0.9$). There were no significant change in the number of students who reported that they had been bullied from the follow up to the post-test period for School B.

In addition to looking at rates of student experiences around bystander and bullying behaviours, participants were asked to identify how they responded in bullying situations and what negative behaviours they had engaged in or experienced from others.

Intervention behaviours. As participants self-selected into responding to these questions, based on the earlier indication as to whether or not they had been or had seen someone being bullied, the number of participants responding to these items was quite small. Due to the small sample size data for these measures were not analyzed as no meaningful results would be found.

Aggressive Behaviours. As with the larger set of participants, data was collected to assess how often and what types of aggressive behaviours occurred most often within the case study schools. All participants were asked to indicate what aggressive behaviours they had used towards others and which ones they had personally experienced. A summary of the results for these responses is presented in Table 19.

Table 19

ANOVA Results and Simple Effects for Case Study Aggressive Behaviours

Measures	Groups	Primary Division			Junior Division		
		One Year Follow Up	Final Post-test	Group x Time	One Year Follow Up	Final Post-test	Group x Time
Cyber Bullying	A	0.08	0.05	F(1,63)	0.27	0.09	F(1,33)
	B	0.00	0.18	= 1.733	0.04	0.21	= 3.370~
Verbal Bullying	A	0.72	0.70	F(1,63)	2.27	1.09	F(1,32)
	B	0.77	1.18	= 1.474	1.04	1.70	= 3.693*
Social Bullying	A	0.37	0.26	F(1,63)	1.27	0.36	F(1,32)
	B	0.55	0.50	= .066	0.04	0.74	= 6.681*
Physical Bullying	A	0.70	0.65	F(1,63)	1.64	0.55	F(1,32)
	B	0.50	0.95	= 2.901~	1.04	1.56	= 3.546*
Threats and Intimidation	A	0.23	0.28	F(1,63)	1.18	0.36	F(1,31)
	B	0.59	0.36	= .884	0.05	0.18	= 2.791

A = Intervention (two years of programming)

B = Comparison (one year of programming)

~ p < .1

* p < .05

Significant follow up - post differences within the intervention and comparison groups are indicated by the bolded numbers

Aggressor responses. At the follow up period, the rates of using aggressive behaviours for students from both School A and School B yielded no significant differences when compared

to the rest of the comparison site students. By post-test, only one marginally significant group by time interactions was found in rates of use of physical bullying ($F(1,63) = 2.901$, $p = .09$ for students in the primary division. An assessment of the difference in means between the follow up and post-test period indicate that, while no significant changes occurred in School A, rates of physical bullying increased significantly at School B during the same time period ($t(21) = 2.109$, $p = 0.05$, Cohen's $d = 0.33$). No additional group by time interactions or simple effects were found for this group. In contrast, several significant, or marginally significant group by time interactions, were found for students who received the junior division of the program for the second time. To begin, there was a significant group by time interaction for cyber bullying ($F(1,33) = 3.370$, $p = 0.08$, partial $\eta^2 = .093$). While no simple effects were found on this measure, there appears to be a trend towards a decrease in cyberbullying at School A, where the program was run two years in a row, while rates were beginning to increase at School B. A significant group by time interaction was also found in verbal bullying ($F(1,32) = 3.693$, $p = .064$, partial $\eta^2 = .103$) with students from School B reporting an increase in the use of verbal aggression ($t(22) = 1.696$, $p = 0.07$, Cohen's $d = 0.39$), while rates remained stable at School A. Group by time interactions were also found with respect to social bullying ($F(1,32) = 6.681$, $p = .015$, partial $\eta^2 = .173$) with significant increases found in the use of social aggression at School B ($t(22) = 3.272$, $p = 0.00$, Cohen's $d = 1.00$) and no changes reported at School A. Finally, group by time analysis of physical bullying also revealed a significant interaction ($F(1,32) = 3.546$, $p = .07$, partial $\eta^2 = .1$) with an increase again found in the follow up - post- data from School B ($t(22) = 2.409$, $p = 0.03$, Cohen's $d = 0.29$) while rates at School A remained stable. One final simple effect was found for the use of threats and

intimidation in School B, where a marginally significant increase in the use of this type of aggression was reported ($t(21) = 1.821$, $p = 0.08$, Cohen's $d = .34$).

Table 20

ANOVA Results and Simple Effects for Case Study Target Experiences

Measures	Group	Primary Division			Junior Division		
		One Year Follow Up	Final Post-test	Group x Time	One Year Follow Up	Final Post-test	Group x Time
Cyber Bullying	A	0.69	0.38	$F(1,61) = 1.650$	0.64	0.27	$F(1,34) = 2.850$
	B	0.00	0.10		0.20	0.50	
Verbal Bullying	A	2.86	1.76	$F(1,61) = 0.33$	4.81	4.55	$F(1,33) = 2.381$
	B	3.29	2.33		2.58	4.13	
Social Bullying	A	1.76	1.31	$F(1,61) = .018$	1.64	1.82	$F(1,33) = .218$
	B	1.90	1.52		1.21	1.75	
Physical Bullying	A	2.71	1.90	$F(1,61) = .036$	1.91	1.72	$F(1,33) = 1.560$
	B	2.71	2.05		1.96	2.83	
Threats and Intimidation	A	1.71	1.36	$F(1,61) = .962$	1.64	1.36	$F(1,33) = .243$
	B	2.38	1.43		1.38	1.38	

A = Intervention (two years of programming)

B = Comparison (one year of programming)

Significant follow up - post differences within the intervention and comparison groups are indicated by the bolded numbers

Target Responses. As a final measurement of the use of aggressive behaviours, all students indicated how often they had been targeted by others in the two months prior to completing the survey. Results for analysis of this data are summarized in Table 20. No significant group by time interactions were found for either primary or junior level students through the use of a mixed ANOVA, although the trend in scores was in the desired direction as shown through several simple effects noted between the follow up and final post-test scores. At the primary level, students at School B reported decreases in being the targets of verbal bullying ($t(41) = 2.277$, $p = .03$, Cohen's $d = .38$) and social bullying ($t(41) = 1.858$, $p = .07$, Cohen's $d = .22$), with a marginally significant change. Students at School A, in comparison, did not report similar changes but did report a decline in the use of threats and intimidation ($t(20) = 1.910$, $p = .07$, Cohen's $d = .51$), again with a marginal result. Data from students receiving the junior

level of programming did not reveal any significant changes; however students from School A reported increases in both verbal ($t(23) = 2.612, p = .02$, Cohen's $d = .48$), and (marginally) social ($t(23) = 1.919, p = .07$, Cohen's $d = .43$) bullying.

Staff Results

The results presented in this section address the eighth research question set out for this study: *Do school staff reports substantiate student reports of changes following program implementation?* Staff from each of the intervention sites were asked to provide feedback on their experiences with the program with respect to overall program satisfaction and the changes they had seen within their schools and classrooms following program implementation. Answers were collected using a short, online survey.

Program Satisfaction. Overall, staff rated levels of program satisfaction highly, with average responses to the questions falling slightly below “Strongly Agree”. Staff indicated that the material was presented in an engaging, age-appropriate way, and that the resources and information provided provoked classroom discussion. Further, 77% of staff either moderately or strongly agreed that the program aligned with one or more components of the Ministry of Education’s curriculum. Overall, almost 80% of staff were very satisfied with the program while only 2 respondents indicated that they were very dissatisfied, although they did not indicate why they selected this response option. Even though the two respondents reported being dissatisfied, data shows that all participants would encourage other schools to use the program and would be willing to use the program in their class again.

Program Impacts. Staff were asked to identify some of the program impacts and benefits that they had seen in their students, in themselves, and in their schools. The first question asked respondents to discuss some of the changes they had seen since the program had ended. In

assessing changes in students, staff frequently mentioned that students were using the common language provided by the program in identifying, discussing, and addressing bullying:

The vocabulary is a very strong part of this program. Kids are able to grasp onto the generalized types of bullying, definitions and responses. I have heard the use of the vocabulary from my students and have heard students using some of the common language in the halls.

Staff also noted that there were increases in student awareness of bullying and in the accurate reporting of bullying and aggressive behaviours. As one teacher noted “students are more willing to come forward and address issues of bullying and to talk and discuss what strategies everyone can use to mitigate or prevent such things from happening”. Additionally, students had begun to use the skills taught through the program to help address bullying situations by sticking up for themselves and for their peers. Finally, teachers noticed some changes in how students were relating to one another, which is a skill required in order to reduce rates of bullying. One teacher in particular noted that “students seem to be more aware of feelings and working with empathy. I have witnessed more tolerance and understanding through discussions between and amongst our students both in the class and on our playground”.

With regards to changes that staff themselves had experienced, respondents indicated that they appreciated the common language as it gave them a better format for understanding bullying and discussing it with their students. The common language was also important with respect to the definition of bullying, which staff stated was important in helping them to better recognize bullying and differentiate it from occasional misbehaviour. Further, staff were now more aware of bullying and were increasingly willing to intervene on a student’s behalf.

Finally, changes at the school level were also reported by staff who again noted that students and staff now had a common language for discussing bullying and had a model for expectations on how to behave and intervene when bullying occurred. Staff also indicated that bullying had decreased since the program, with very little overt bullying occurring. Overall, even staff who reported that their school climate was generally positive had seen positive impacts as a result of the program as the school had become a more respectful and caring place.

The second area that was assessed through qualitative responses focused on the benefits of the program for students, staff, and the larger school community. Of the benefits staff listed for students who received the program, the development of strategies for dealing with bullying was most often cited. Staff noted that students presented increasingly positive attitudes when dealing with conflict resolution and appeared to be confident and comfortable in using assertive strategies. A large part of this may have come from the newfound knowledge and language students have to express themselves. Further benefits come from the style with which the program is presented. Staff stated that the engaging and non-threatening format used by the program coordinator facilitated learning for their students. In particular it was noted that the “ease of talking about bullying in the classroom setting helped because it was presented as happening to other people in the books/stories. As a result kids could participate/relate/discuss/connect with the ideas more readily.”

Assessments of benefits to staff also yielded positive results. In particular, staff appreciated hearing a knowledgeable, professional opinion on bullying at the same time as the students. They further stated that the awareness around bullying was hugely beneficial for them as it gave them a reference point for having discussions with students around bullying and

aggression. Finally, staff stated that the awareness piece was important as it went beyond the understanding of bullying among students as they recognized that adults can bully others as well.

The final assessment was around the benefits of the program to the school community. First, staff indicated that the school benefited because of the common language presented in the program as it provided everyone with a base for understanding bullying. Beyond this, however, they felt that the program provided consistent messaging about bullying for students, which in turn can impact how bullying is addressed within the school community. Finally, the promotion of positive behaviours that occurred as a result of the program has led to overall changes in the school with one teacher stating that “the school has a more positive climate now. You can feel it!”

Program Impressions and Suggestions

The final research question established for this study was: *What are the overall impressions participants have of the program and what changes would they suggest making?* Both students and staff were asked to answer a series of qualitative questions designed to answer this question. For the most part students indicated that they enjoyed the program, with the exception of approximately 13% of students indicating that they did not enjoy the program for various reasons. Many students provided explanations for their answers stating that they found the material to be boring and repetitive or that the language used to describe the information was not age appropriate. Further complaints from three students was that the program was too long, although they did not identify whether the length had to do with the individual sessions or the total number of sessions, and that some of these sessions cut into their gym class. Nearly 30% of students who stated that they did not enjoy the program indicated that this was because they did not feel that the skills they were learning would be effective if they needed to use them or believed that bullying would not stop because of the program:

I don't understand why we have to learn this stuff. People tell us don't bully all the time. Guess what? Kids still do it. They don't listen and having someone tell us again isn't going to make bullying stop.

The vast majority of respondents however were very satisfied with the program. As previously noted, staff scored quite high on the satisfaction items provided in the online survey and reinforced this finding over the course of the year with many teachers telling me during the post-test period that they had thoroughly enjoyed the program and felt that it had positively impacted many of the students in their classes. One teacher in particular provided the following feedback in the online survey:

The program was age appropriate, engaging, and helpful for all staff and students. We were happy to work with your organization and would love for you to return in the coming school years.

Students also enjoyed the program and agreed that they had gained many skills to help them address bullying. The majority of student participants found the program to be fun and interactive and liked the way that the material was presented. For the most part they enjoyed the songs and characters that were connected to the various aspects of bullying behaviour and noted that the use of these teaching strategies helped them to remember and feel confident in using the skills they had learned:

I LOVED the program. Everything about it was so fun! And I learned a lot. Like how not to be a dragon even when I feel angry and how to help someone else by being a knight. I can think of them in my head and remember what I'm supposed to do.

In addition to asking students and teachers for their overall impressions of the program, participants had the opportunity to provide feedback on their suggestions for improvements that could be made to the program. Students, in particular, offered several suggestions that tied into feedback that had been given throughout the qualitative responses. The most frequently suggested change to the current program format was to include more sessions or to lengthen the existing ones so that they would have more time to learn the material. Many participants stated that the 30 minute sessions did not leave enough time to thoroughly understand the material, particularly when a large portion of that time was spent reviewing material that had been learned during the previous session. Students who stated that they did not remember much about the program also noted that more sessions, or a follow up later in the year, would be helpful for them to remember those skills over a longer period of time. While it was generally students who made

this request, staff also indicated that this would be helpful, with one teacher stating “I would like to see a follow up visit later in the year in order to reinforce some of the skills students have learned”.

Students, particularly those in the junior division, were also interested in learning more information about bullying. In particular they wanted to talk more about why students would bully others and learn more hands on skills for addressing bullying. There was specific interest in being able to discuss different bullying scenarios, have more demonstrations and potentially role play scenarios so that students felt more prepared to intervene effectively.

Finally, students and teachers both recommended making the program more interactive, again suggesting the use of role plays and skits or other hands on activities that might help to solidify their learning. Students said that this would be helpful in keeping their attention because they found themselves becoming bored when material was presented in a lecture style. They noted that being able to actively participate would likely keep them engaged and help them to better understand and remember the material and skills.

Chapter 6 - Discussion

The purpose of this evaluation was to determine the impact of John Howard Society Waterloo-Wellington's bullying prevention program on students in local elementary schools. Both divisions of the program, *One by One We Get Along* and *The Power Within*, were evaluated in terms of the major program objectives established in the program logic model. The results of this evaluation include many findings that deserve further discussion and may provide direction for improvements to the current program. In this section, I will first review the desired program outcomes with respect to the major research questions that were established for this evaluation. Second, the current strengths of the JHS WW bullying prevention programs will be presented, as per the results of the evaluation. Finally, I will present suggestions for program improvements or changes based on study results, student feedback, and discussions between myself and the program coordinator.

As previously stated, several research questions were identified for this study including:

- 1) To what extent does the program affect the cognitive judgements students make of self and others with respect to bullying situations?
- 2) To what extent does the program impact overall rates of bullying?
- 3) To what extent does the program impact behavioural responses with respect to how students respond to bullying either as a bystander or a target of bullying?
- 4) To what extent does the program impact the degree to which students engage in or are the target of various aggressive behaviours?
- 5) What program concepts and skills do students remember following program delivery?
- 6) What are the long-term impacts of the program one year after students receive it?
- 7) What are the benefits to running the program in the same school two years in a row?

- 8) What are the overall impressions participants have of the program and what changes would they suggest making?

In many cases, the results of this study positively support the use of these programs as a strategy to address and prevent bullying in elementary schools. Answers to each of these questions will be presented in detail, based on the results of both the quantitative and qualitative data gathered from students and staff members.

Research Question #1: Cognitive Judgements

In revisiting the logic model for both levels of the JHS WW bullying prevention program, changes were expected to occur for a variety of cognitive judgements with respect to bullying that students made of themselves and others, as well as their appraisals of their school environments. These judgements relate directly to desired outcomes presented in the logic model such as changes in levels of empathy for students who have been targets of bullying, their motivation to intervene in a bullying situation and belief in their ability to do so effectively. Further, changes that were expected in this area include an increase in students' understandings of which behaviours are acceptable and which are not, and judgements about school climate, particularly in terms of the acceptability of bullying behaviours. Increases in self-esteem were also expected following program implementation. The data gathered through this evaluation provides evidence of positive changes in almost all of these areas.

Beginning with empathy, results for students receiving the junior level of programming revealed significantly higher scores at post-test than at pre-test, whereas students in the comparison schools showed a decrease in empathy from pre- to post-test. Following the program, students receiving either the primary (Junior Kindergarten through Grade 3) or junior level (Grade 4 through 6) of programming reported increases in their motivation to help others

when individuals were being targeted. Changes were not seen in the groups that did not receive programming. Motivation remained the same for primary level students and decreased for those in the junior division. In addition to empathy being a factor for increasing the motivation to help others (Nickerson et al., 2008), students need to have the skills required to address bullying behaviours when they occur, and feel confident in their ability to use these skills effectively (Poyhonen et al. 2010; Whitson, 2013). Rates of self-efficacy produced some of the largest changes following program implementation, with students indicating that they now felt that intervening in bullying would be easier than it would have been prior to the program. Similar changes were not seen in the comparison sites where levels of self-efficacy did not change from pre- to post-test. The changes in self-efficacy are of particular importance as the degree of comfort felt in using defending behaviours is a significant predictor of the likelihood that a bystander will engage in appropriate interventions (Poyhonen et al. 2010).

Another major change was found in student judgements of their school environment. Following the program, junior level students at the intervention sites rated their schools more favourably than did junior level students at schools without the program who rated their schools significantly less favourably at post-test. Further, primary level students at program schools also indicated improvements in this area while students from the comparison sites showed no changes in their ratings of the school climate. This finding indicates that the overall climate of the schools where programming occurred began to feel safer for students, with bullying being an increasingly unacceptable behaviour at the intervention sites. This change was not only reported by students; staff at the intervention sites also stated that the school climate had changed for the better following program implementation. Such results are promising based on existing research indicating that a positive school climate is critically important in bullying prevention as it plays a

significant role in the success of bullying prevention programs, particularly with respect to decreases in bullying-related behaviours and attitudes (Low & Van Ryzin, 2014). Further, it has been found that in schools in which the climate is rated favourably, students are less likely to participate in bullying and are more likely to engage in help-seeking behaviours (Wang, Berry, & Swearer, 2013). While a relationship between school climate and bullying has been established, a review of the evaluation literature on did not yield any information about the ability of bullying prevention programs to impact the overall climate of the school.

While significant changes were not found for every outcome presented in the logic model, it should be noted that students often scored so high during the pre-test period that there was little room for change at post-test. Further, self-esteem was the only area of cognitive judgements where no significant changes were found in any of the groups of intervention students. In the program logic model, self-esteem was identified as a long-term outcome for the program and there was only a short amount of time spent focusing on this area in the program content. As such, it is not surprising that no change in self-esteem occurred by the post-test data collection period. Despite no statistical findings in support of this area, some small changes were identified in the qualitative data where some students reported not being as bothered by being treated poorly as they had been prior to programming, which could be connected to the early development of higher self-esteem.

Overall, there were several positive changes to the previously identified cognitive judgements made by students who received the program. Similar changes in judgements of self and others were not reported by students at the comparison sites where rates in these areas remained stable or decreased from the pre- to post-test period. Given these results, the program appears to have made a significant impact on students with respect to most of the outcomes

presented in the logic model, leading up to overall reductions in bullying. This is particularly true of children in Grades 4 through 6 who received the junior level of programming, where the majority of significant changes were found. In contrast, there were fewer significant changes found for the students in Junior Kindergarten to Grade 3, who received the primary stream of the program. These results stand in contrast to Rigby's (2002) meta-analysis of evaluations in which it is noted that the likelihood of an intervention being successful is greater when said intervention programs are implemented with younger students, from Kindergarten through the primary years, as without such programming bullying behaviours increase over time. Despite the few changes found for the primary intervention students, the program may be preventative in its ability to reinforce positive cognitive judgements in students at an early age thus preventing future decreases in these cognitive judgements while acting as an intervention method for older students who might otherwise experience decreases in these same areas. The promise of this program as a preventative measure for bullying is an area for future research. Researchers may be able to examine this hypothesis by tracking the cognitive areas identified in this study along with the behavioural changes and rates of bullying over time for students who receive the program in their early school years compared to students who did not receive the program. It would also be of interest to examine the differences between students who received the JHS WW program on an ongoing basis against those who only received the program once.

Research Question #2: Rates of Bullying

Changes in rates of bullying occurring at the schools where the program was implemented were assessed in a variety of ways. To begin, students were asked at both the pre and post-test periods to indicate whether or not they had witnessed bullying or had been targeted themselves. By the post-test period, reports from students receiving either level of programming

showed significant or marginally significant reductions in the percentage of students who had either witnessed bullying or had been targeted by someone else. In contrast, data from students at the comparison sites revealed no significant pre-post changes in either of these areas. While viewed independently, these statistical findings provide support for the program impacts on bullying behaviour. The results also complement one another with the reduction in the number of students who reported witnessing a bullying interaction supporting the reduction in student reports of being targeted by others. As fewer students experience bullying by others, it stands to reason that fewer students would see such interactions occurring, as was seen in the intervention schools.

Authors who have reported on reviews of bullying prevention programs have indicated that asking about bullying itself presents some measurement challenges (Bradshaw, 2015; Evans, et al., 2014). It should be noted that, while these challenges were taken into consideration in the development of the methods and measures used in the present study, the critiques put forth by these authors had not been published at the time that the study began. In terms of specific criticisms, Evans et al. (2014) state that most evaluations of bullying prevention programs include asking about bullying through the use of a single-item measure (e.g. “how often have you bullied someone in the past two months?”). Such measures can lead to inaccurate results because of the complex nature of bullying, particularly as bullying can occur in a variety of forms and the word bullying on its own can be interpreted differently by different people (Evans et al., 2014). As noted in the literature review, Bradshaw (2015) indicates that despite these measurement challenges, self-report data remains one of the most valid methods for assessment in bullying research. In order to address the challenges presented by self-report measures, Bradshaw (2015) recommends the use of secondary indicators for assessing rates of bullying.

Specifically, when asked directly if they have been bullied or have bullied others, students may not respond accurately either because they do not perceive behaviours as bullying, may not recognize their behaviour as a form of bullying, or may be impacted by the value-laden nature of the word bullying, thus not wanting to be associated with either a bully or victim position. As a result, it is recommended that researchers employ various strategies to compensate for these areas such as including definitions of bullying, asking directly about bullying behaviour, and substantiating this information by following up with questions asking about specific behaviours.

Each of the strategies identified by Bradshaw (2015) was used in this evaluation in order to achieve a more accurate assessment of rates of bullying. In addition to the stated reduction in reports of bullying, data on the use of aggressive behaviours, to be discussed in more detail later, provide support for these changes. When asked to identify which aggressive behaviours they had used in the two months prior to testing, marginally significant group by time interactions were found for physical bullying for the primary students and verbal bullying and the use of threats and intimidation for the junior level students. While only data on physical bullying yielded a significant simple effect, the general trend for the data on rates of bullying revealed that overall scores for these areas were lower for the intervention groups and higher for the comparison sites. Adding to this finding, significant group by time interactions were found for the target responses in terms of verbal, social, and physical bullying. Here, junior level students at the intervention sites reported only small, non-significant reductions in the number of times that they had been the targets while significant increases were found at the comparison sites. This data will be discussed in more detail in response to question four where I will further examine program impacts on the degree to which students engage in or are the target of various aggressive behaviours. Overall, the data from this evaluation provides strong evidence that the program was

effective in reducing rates of bullying for students who received either level of the program, with the greatest benefits again being found for the junior level students. The large reductions in bullying behaviour found in this evaluation place the JHS WW programming within the small number of prevention programs that have been found to be associated with decreases in bullying. As previously noted, meta-analyses have been conducted with decreases in bullying only being found in 20-50% of these evaluations, with fewer positive results found as the rigor of the evaluation increased (Evans et al., 2014; Farrington & Ttofi, 2009).

While true decreases in bullying may indeed have occurred, the changes in rates of bullying behaviour may also be related to students at the intervention schools becoming increasingly aware of the difference between bullying and individual acts of aggression. Through the program, students learn that in order for a particular behaviour to be identified as bullying it must meet several criteria. First, it must be repeated, in that either a specific behaviour is occurring frequently or that the individual has been targeted repeatedly in a variety of ways. Second, the behaviour must be intentional, meaning that it is done on purpose, often with the intent to cause harm or distress to the other person. Finally, the behaviour must be seen as hurtful to the person who is being targeted. As a result, behaviours that might have occurred accidentally (for example bumping into someone in the hallway), that might have happened because a person was acting aggressively one time, or that the target did not interpret as hurtful, for instance friendly teasing, may no longer meet a definition of bullying. Instead of true decreases in bullying, the reported changes in the amount of bullying occurring at the intervention sites may be the result of students using the information presented in the program to make more accurate judgements about which behaviours constitute bullying leading them to no longer report behaviours that do not meet these criteria. Although bullying is a repeated form of aggression,

the conflation of bullying and aggression has been pointed out as a weakness in bullying prevention program evaluations as it can skew the results and indicate a reduction where one had not occurred (Evans et al., 2014). While I acknowledge that this is a possibility in this study, understanding the difference between aggression and bullying, thus leading to more accurate reporting is also a critical component of the JHS WW bullying prevention program. Despite this possibility, the decrease in rates of being targeted by individual aggressive behaviours provides support for the reported reductions in bullying at the intervention school. As a result, it is likely that the change in reports of witnessing or experiencing bullying are due to true changes in the rates of these behaviours at the intervention sites rather than a result of students having changes how they interpret behaviours as bullying.

Research Question #3: Behavioural Responses of Bystanders and Targets

Throughout the program, students are taught how to appropriately intervene when they witness bullying occurring and when they themselves are the targets of bullying. A variety of skills are taught to students to help them act assertively in situations where bullying might be happening. A number of appropriate responses are identified through the program, including defending the person being targeted, getting help and telling an appropriate adult. In addition to learning how to defend themselves, the concept of bystander intervention receives specific attention, particular within the junior level of programming. As noted in the literature review, bystanders play an important role in bullying, with the lack of appropriate bystander interventions being linked to increases the frequency and duration of bullying episodes (O'Connell et al., 1999). However, a separate study found that when peers do intervene the bullying incident stopped in 57% of cases (Hawkins, Pepler, & Craig, 2001). As such, it is critical that students learn skills to help intervene in bullying situations in appropriate ways. In

The Power Within, students are taught about various types of bystanders, including those who might make the situation worse by joining in, making a joke, or just standing and watching without helping. While positive behaviours are taught to all students, the use of negative bystander behaviours are discouraged and a reduction in the use of most of the unhelpful interventions was seen in students at program schools. As previously noted, the assertive behaviours learned for responding to a bullying event are grouped together in categories representing the First AID strategy which serves to remind students of the need to assist, inform, and defend when they or someone else is being targeted.

The results show that no significant group by time interactions occurred with respect to how students at either the primary or junior level intervene when others are being bullied. Although students are explicitly taught skills for intervention in a bullying situation, there are possible explanations for the lack of significant changes in the use of such behaviours. Poyhonen et al. (2010) note that in addition to self-efficacy for defending peers, other factors that facilitate the use of defending behaviour include social status and an existing reputation as a defender; areas not addressed by the program. While such factors may increase the likelihood of utilizing appropriate defending behaviours, barriers to becoming involved in bullying situations may include the fear of social consequences, being targeted as the result of standing up for others (Pister, 2014; Salmivalli, 2014), or students not believing they have the power to stop the bullying from happening (Pister, 2014). Whitson (2013) adds that further barriers to bystander intervention including the belief that someone else will step in, being friends with the person doing the bullying, not knowing the person doing the bullying well enough, the fear of standing out, and not knowing how to intervene appropriately. A final reason for the lack of significant results in this area may be due to the need for additional opportunities to develop and practice the

skills presented in the program in a neutral environment before students need to use them to intervene. Despite not finding significant interactions in the broader First AID categories, significant decreases were found for the number of times that students from the comparison sites indicated that they assisted or defended a person who was being targeted.

While statistical differences were not found, support for the attitudinal changes that lead to behavioural changes come from some of the other results found through this evaluation. As previously noted, positive changes were found in students' motivation to intervene when bullying occurs and in their self-efficacy for doing so in various situations, with a significant change in these areas being found for the intervention sites but not the comparison sites. These changes provide support for the reported increases in appropriate defending behaviours when someone is being bullied. In addition, students who received the program were generally better able to identify which behaviours were acceptable and which were not, including telling a teacher when someone is being hurt, spreading rumours about others, or ignoring bullying. Once again, significant gains were found in these areas for students at the intervention sites, while those at the comparison sites did not report significant changes on these measures. The increased ability to identify which behaviours are appropriate and which are not may also come into play here as students have become better able to identify inappropriate actions while learning skills to address them. Finally, the previously noted changes in empathy may also support future behavioural changes in bullying intervention. Although the research on the link between bullying behaviours and affective or cognitive empathy is mixed, one point of agreement is that high levels of empathy are positively associated with the use of prosocial behaviours, including appropriate bystander interventions (van Noorden, Haselager, Cillessen, & Bukowski, 2015). Such arguments follow along with Salmivalli's (2014) assertion that enhanced empathy can lead

to increases in the bystanders' desire to help the person who is being bullied. As was mentioned throughout the section on cognitive judgements, the changes found in these areas are all related in the literature to changes in bullying behaviour. As such, the cognitive changes may lay the foundation for behavioural changes to follow.

While the data do not reveal overall changes in the use of appropriate intervention strategies, the qualitative data for this study indicate that small changes are occurring. First, several students were able to provide concrete examples of situations in which they had used the specific skills and strategies provided by the program. Further, several staff reports also indicated that they had witnessed increased interventions and reporting of bullying from their students following the program period. Overall, the findings on the use of intervention behaviours is mixed although the ability to identify aggressive behaviours and a desire to help others, coupled with increased empathy and newly learned intervention skills and increases in self-efficacy around the use of these skills may begin to support appropriate responding behaviours with additional practice.

Changes in the responses from people who have been targeted revealed slightly different patterns. While data for the primary students remain stable with respect to their use of the information, defending, and negative interventions for self, some changes were found for the junior level students. Most notable was their large increase in the use of skills for defending themselves when they were targeted by others. Such findings are promising as past research has indicated that targets of bullying are generally unlikely to seek help from either their peers or teachers (O'Connell et al., 1999). Once again, further support for the use of appropriate interventions comes from the qualitative data where students recalled instances when they would inform their teachers or tell the person who was targeting them to stop.

Research Question #4: Experience and Use of Aggressive Behaviours

As previously discussed, secondary indicators (Bradshaw, 2015) were used to support the results concerning student reports of bullying, either as a bystander or as the target. This set of questions was particularly interesting as the items recognize that bullying and aggression are quite similar, although bullying involves repeated acts of aggression. The use of these questions helps to overcome some of the measurement challenges previously noted, particularly by allowing for some of the complexities around bullying to be viewed. This includes the opportunity to indicate which of several aggressive behaviours were used by students, rather than combining all behaviours together as bullying, helping to establish a clearer understanding for the participants of the specific areas that constitute each form of bullying. Further, these items allowed for students to identify the frequency with which aggressive acts occurred, with higher ratings meaning that an individual form of aggression occurred to an extent that could be viewed as repetitive. These two methods used for soliciting self-report data on bullying are recommended in order to create a more rigorous understanding of the rates of bullying (Bradshaw, 2015).

The items tapping into student use of various aggressive behaviours, or experiences of being the target of these same behaviours, helped to substantiate earlier findings and provide greater insight into the types of aggressive behaviours most often used by students. In looking at aggressor reports, only physical aggression for the primary students at program sites yielded significant changes with rates decreasing at the intervention site and remaining stable at the comparison sites. Further, marginally significant changes were found for the junior level students for both verbal bullying and the use of threats and intimidation.

When assessing changes in aggression based on target reports, several significant results were found in the junior level students who received the program as they were less likely to experience physical or verbal bullying following the program. While not significant, there was also a large decrease in the experience of social bullying for this group of students. In-line with the theory of change created for this program, the reduction in the use of aggressive behaviours may be related to previously reported changes in cognitive judgements. Students at schools where programming was held reported increases in their understanding of acceptable and unacceptable behaviours, and reported that the overall climate of their schools was one in which bullying was not allowed and consequences for targeting others were enforced. As previously noted, school climate, which includes firm rules around the acceptability of bullying, is strongly related to student participation in bullying (Wang et al. 2013) with students being less likely to bully others in schools where such behaviour is viewed as unacceptable. Further, increases in levels of empathy may have led to the reductions in the use of aggressive behaviours. As van Noorden et al. (2015) note in their review of the literature on bullying and empathy, the relationship between empathy and the use of aggressive behaviours is not entirely clear; however some studies have found decreases in the use of aggressive behaviours as gains in empathy occur. To further support the need for bullying prevention programs to contain components designed to increase empathy, previous studies have found that programs which focus on social-emotional learning, including the development of empathy and perspective-taking are among the most promising forms of programming (Smith & Low, 2013).

Research Question #5: Recall of Program Skills and Concepts

Knowledge acquisition was primarily assessed through the qualitative responses given by youth when they were asked what they remembered learning through the program. There were

some students who did not respond to this question or indicated that they were not able to remember anything. However the vast majority of students in the program schools were able to accurately describe program concepts, particularly those involving skills that they had the opportunity to practice. Further, when qualitative data were collected in a focus group format, even students who originally indicated that they did not remember anything taught through the program began to describe various concepts once they were prompted by their peers. Teacher reports also support the gains in knowledge as they noted that they would often hear students using the language taught in the program to accurately describe bullying or aggressive situations, even months after the program had taken place. Overall, knowledge acquisition, as defined by student recall of the skills and concepts taught through the program appear to be quite high, even in schools where it has been more than one year since the program was delivered to students.

Research Question #6: Long-Term Impacts of the Program

Long-term (one year post-program) impacts were assessed using a case study format with two schools where the program had been implemented the year prior to the evaluation period. One of these schools, School A, received the program again during the study period while School B did not and served as a comparison site for School A. As previously noted, one-way ANOVAs were conducted to assess whether or not the follow-up test scores (collected approximately one year after both case study schools had received the program once) for the case study schools were any different from the pre-test scores for schools where programming had not yet occurred. Based on study data, it appears that any changes that may have been present for the case study schools following the use of the program one year prior to this study did not last until the follow-up testing session for this evaluation, providing a lack of evidence for the long-term effectiveness of the program. These results were true of both the cognitive judgements made by

the participants, their behaviour reports with regards to bystander behaviours or defending themselves if they were targeted, and the use of various aggressive behaviours. These results provide strong support for the continued use of the program, but not for the long-term benefits of running the program once.

There was, however, one area where positive effects still appeared to be present for students from School B. Regardless of whether or not a school used the program twice, students who had receive programming in the past still remembered a great deal of the key program concepts and skills. While students in School B schools did not recall all of the program pieces, the components that students discussed in their qualitative responses were very similar to the pieces that were presented by students who had more recently been taught the material. Beyond information recall, this study did not find evidence in support of the long-term effectiveness of the program, particularly with behavioural changes, a finding that is not uncommon for prevention programs (Nation, Keener, Wandersman & DuBois, 2005).

Research Question #7: Benefits of Ongoing Programming

The seventh area that was investigated through this study was the benefits of ongoing programming. In order to address this question, two schools were used as a case study with one school receiving programming two years in a row, while the other did not. Data from the study indicates that the second year of programming proved to be highly beneficial as students who received the program twice reported continued gains on almost every measure with the number and size of the changes found in students who received the program twice (School A) being higher than those who had only received the program during the evaluation year. This was particularly true for the junior level students who again appear to have received the greatest gains from the program. In contrast, students who did not receive the program a second year in a row

reported scores that were consistent with students who had never received programming. As a result, continued programming is important in order to sustain and possibly increase program effectiveness. This finding is consistent with evidence-based behavioural change models in which people begin to use the newly acquired skill and then must maintain these changes and often experience difficulty in doing so. Such models note the importance of building behavioural skills, increasing the environmental conditions that support the behaviours, train for the behaviours in naturalistic conditions, teaching specific cognitive skills to guide the behaviour and practicing the desired behaviours, with higher dosage being linked to greater success (Pratt & Bowman, 2008). Without the providing continued support in each of these areas, as the program is able to do, students may revert back to old thoughts and actions, including becoming less likely to intervene in bullying situations, displaying less empathy towards others, and engaging in aggressive behaviours more frequently than they had following the program. It may be that without ongoing programming, students experience behavioural drift away from the skills that have been learned and back to those that they used before they received the program. While it may not be possible to continue with the full program at every school each year, the program does offer booster sessions by request, which may help to mitigate the negative changes found in the school where programming did not occur a second time.

Research Question #8: Program Impressions and Recommendations

The first portion of this section of the discussion is aimed at placing the John Howard Society WW's program within the context of other bullying prevention programs that have been implemented throughout North America. The second portion of this area of discussion will focus on the impression and recommendations for program improvements or changes based on the research contained in this evaluation.

Several evaluations of bullying prevention programs have been conducted, with authors performing systematic reviews of many of these evaluations and finding mixed results from each evaluation. In a review of 24 separate bullying prevention programs conducted by Evans et al. (2014) it is reported that only half of the program evaluations focusing on bullying perpetration yielded significant results while 67% of those assessing victimization reported significant declines. Further, it was found that the more rigorous the evaluation, the fewer significant results were found, with only one such study reporting significant changes in the self-report of victimization. This evaluation was conducted on the KiVA program which includes 20 hours of lessons designed to enhance empathy and self-efficacy, and promote anti-bullying attitudes in bystanders through the use of discussions, group work, role playing, films, and a KiVa video game. Overall, meta-analyses have found that while some programs have been effective in targeting bullying, the majority of these took place in homogeneous areas outside of North America, including the aforementioned KiVa evaluation that was conducted in Finland. Such findings indicate that the degree of heterogeneity where a program is being used may impact the effectiveness of bullying prevention programs. Specifically, it appears that the more diverse an area is, the less effective these programs tend to be. In a similar review conducted on 44 separate school-based interventions, Ttofi and Farrington (2011) report an average reduction of bullying by around 20–23% and a reduction in victimization by around 17–20%. From analyses such as these it is clear that bullying prevention programs can work, although the specific components that make a program effective are still largely unknown. Ttofi and Farrington (2009) set forth several components they believed to be critical to the success of a program, including length and duration, the use of disciplinary strategies, and teacher and parent training; however these components have been called into question as subsequent analyses have not found support for

these claims (Smith, Salmivalli, & Cowie, 2012). Further, it should be noted that these reviews focus only on the changes in bullying behaviour rather than on the specific processes that support a reduction in bullying, including increases in empathy and self-efficacy. In light of such results, the changes in bullying and cognitive judgements that occurred following this program provide strong support for its effectiveness in targeting bullying and victimization, making it a program with a great deal of potential for continuing to reduce bullying behaviours in elementary schools.

One critique of many bullying prevention programs that are in existence is that they are not really preventative in nature; rather the focus is on reducing rates of bullying after it has become problematic (Temkin & Snow, 2015) or when the use of aggressive behaviours will be increasingly difficult to eliminate. The focus of bullying prevention tends to be on older students, even though an American study on violence, abuse, and crime in children and youth reported that children in the two to five year age bracket reported experiencing physical and verbal bullying (Finkelhor, Turner, Shattuck, & Hamby, 2013). Further, studies have found that bullying in primary school aged children leads to increased difficulties in adjustment both behaviourally and at school, including a decrease in happiness at school, the use of fewer prosocial behaviours, as well as increases in negative internalizing behaviours (Arsenault et al., 2006). Researchers are increasingly noting the importance of targeting bullying prevention efforts, particularly those focusing on social-emotional skill development, on younger children in order to instill these prosocial skills before bullying behaviour increases (Temkin & Snow, 2015). The JHS WW program is one that provides prevention programming to younger students in an accessible and age-appropriate way in order to establish the use of prosocial skills, increase empathy, and teach children alternatives to aggressive behaviours before such patterns become established in their daily interactions with others. Furthermore, the program offers ongoing education that gradually

builds on concepts using methods that are appropriate for older students, thus allowing for continuity in what children are learning both across the grade levels and as students' age.

Program Recommendations

A discussion of the program impressions and suggestions made by staff and students at schools receiving the program was previously provided in the results section for both the students and staff measures. In brief, the majority of staff and students had positive reviews of the program, stating that it was enjoyable and had provided students and staff with important knowledge of and skills for addressing bullying. In addition to the overall positive feedback, several program recommendations came about in the qualitative data. This information is reviewed below alongside recommendations made by the evaluation team.

One of the most common suggestions given by the participants at schools where programming occurred was the request for additional program time as they found that five half hour sessions was not enough time for them to fully grasp the material being presented. Such feedback is consistent with recommendations by Nation et al. (2003) who state that programs must include sufficient dosage if they are to be effective. As part of the requirement for sufficient dosage, programs that provide more contact with participants tend to be more effective than those that provide less contact. This can be assessed in terms of program sessions or the length of time spent on each session, with sessions needing to be long enough to thoroughly present the information. Part of the feedback often given by students was that the program sessions went by too quickly, particularly as some of the time was spent covering old material. In addition to this, I attended several sessions in order to familiarize myself with the program and noted that often the 30 minute time frame went by very quickly, especially if students were distracted or had questions or if the session was late starting. As a result, students often did not have an

opportunity to practice the new skills being learned or the material had to be presented rather quickly. Adjusting the program to include more, or even slightly longer, sessions would allow for more time to be spent covering new material in order to ensure that students thoroughly understood what was being presented.

The criterion of sufficient dosage also includes a recommendation to hold a follow up or booster sessions designed to support and sustain previous learning and changes that occurred following the initial program period (Nation et al., 2005). As was demonstrated through the data for this evaluation, the positive effects of many successful interventions decrease over time. In this study, data from the follow up schools support this finding as their scores on most of the measures were similar to those of the other schools prior to the program sessions. Despite having retained a great deal of the information delivered during the program, there was no evidence that any behavioural changes had been maintained. Further, the school that received programming for a second time in a row had continued improvements in student scores across almost all measures. Although it is not possible to offer the program every year, to every school in the area, making use of shortened booster sessions, which are offered by request through the program, to each of these schools may be beneficial in terms of continued positive outcomes, particularly with respect to the use of the skills taught throughout the program.

Students also frequently identified a need for additional opportunities to practice the skills they were learning. A common difficulty found in programming that focusses on behavioural changes is the adoption of the new skills that have been taught. Program participants may have difficulty translating the knowledge they have received throughout the program into the actions or behaviours that are desired following program implementation. A meta-analysis conducted by Durlak et al. (2011) found that the most effective programs involving skill

acquisition are those that are highly interactive and involve role playing and coaching as students engage in a series of activities designed to guide them towards the use of the desired behaviour. While a reduction in bullying did occur following the program, omitting or reducing a behaviour may happen more easily than consistently using a newly learned skill. For example, students were told which behaviours they should not engage in (bullying, aggression) while being taught new skills that they should continue using (active bystanders, seeking help, assertive communication). Refraining from engaging in a behaviour that could carry negative consequences may be easier to do than would be using newly acquired skills if they have not been given plenty of opportunities to practice and become comfortable with those skills. Students were able to demonstrate that they had knowledge about assertive strategies for addressing bullying and indicated that they felt a greater degree of efficacy around doing so than they had prior to programming; however the addition of more opportunities to practice these skills may help to translate the efficacy students feel around using them into actual skill implementation.

Based on feedback from some of the students in the program, older participants in each level of programming noted that the language used to describe passive, aggressive, and assertive behaviours was a little young for their age group. Some students suggested that creating a third, more age-appropriate format for presenting these characters would be beneficial in generating more interest in learning about the different ways of responding to situations. Currently, there are students in grade 3 and 4 split classes who may be learning the same material, using the same characters, which students in grade 1 are using. It is possible then that Sue the Blue, Fred the Red, and Hello Yellow might work best for students up to Grade 3, Dragon, Knight, and Gnome would work for Grade 3 and 4 students, and a new format could be developed for the Grade 5

and 6 students. This addition may hold increased importance during occasions where the program is implemented with students in grades 7 or 8, either at a middle or composite school.

Teacher engagement was problematic throughout the program evaluation, as seen in the very low response rate to the staff survey. When I was visiting classes to watch the individual sessions, I frequently noted that teachers were not engaged, participating, or paying attention to the material being presented. In addition, when prompted to indicate which program sessions they attended with their class not one session at either the primary or junior level had 100% teacher attendance. It is very unlikely then that many teachers are present with their class throughout the entire program. This absenteeism may be the result of a teacher taking time off or because the students were in a different class for some of the program sessions; however the inconsistency around teacher attendance may be detrimental to the overall effects of the program, particularly with regard to changes in overall school norms and the use of a consistent language around bullying. It is also worth noting that teacher absence throughout the program may have resulted in the lower ratings of JHS WW program alignment with Ministry of Education curriculum components. This recommendation is consistent with literature around the role of teachers in bullying prevention and interventions presented by Yoon and Bauman (2014) in their review of the importance of teacher involvement. The authors cite studies in which it was reported that teacher responses to bullying impact levels of both the amount of bullying that occurs in schools and the frequency with which bystanders intervened. The skills taught through the JHS WW programs can be used by teachers who need to intervene in a bullying incident; however teachers need to be present in order to learn these skills. Further, the program is designed to provide schools with a common language and understanding around bullying while providing students with options to assertively help others, including appropriate reporting to

teachers. As such, it is imperative that teachers are actively engaged in the sessions so that they are better able to support student skill development and use. Potential solutions include the development of an outline of expectations for teachers prior to delivering program sessions, explicitly including teachers in the session, and soliciting support from teachers in the time between program sessions. Teachers may be able to assist in creating or implementing activities or assignments for their students that focus on the messages being through the program. Students have indicated a need for time to practice the skills and teachers may be able to fill this gap by having them work on using the skills in class. Holding ongoing discussions around bullying, demonstrating appropriate responses, or having students write stories that involve the use of the skills they are learning may all help to support student understanding and use of skills taught in the program.

Strengths and Limitations

Several strengths and limitations have been identified in this research. A major strength of the evaluation is found within the sample used for this study. The overall sample of 384 students, across several sites and two different age groups, provides a great deal of statistical power, and thus increased confidence in the results of this study. Further to this is the very high rate of retention in the sample. In looking at the intervention sites only 8 (0.05%) participants left the study, while 14 (0.07%) participants from the comparison group did not complete the study.

As previously noted, it is important to include varied methods in collecting data for bullying research, particularly where self-report surveys are being used (Bradshaw, 2015). While this research, and other documents critiquing the use of self-report measures, were not available prior to beginning this research, these methods were still included in the evaluation design. These methods include the previously mentioned secondary indicators for bullying, as well as the

opportunity for students to provide qualitative evidence for many of the cognitive judgements and behavioural changes that were found through analysis of the quantitative measures. Further, while response rates for the staff survey were low, as will be discussed in the limitations, the inclusion of these measures does present a methodological strength for the study.

A third strength involves the inclusion of a case study examining the one year follow up and impacts of continued programming. The case study section provided an opportunity to assess the lasting nature of the impacts found throughout this evaluation. While it cannot definitively be said that similar changes occurred in these schools following the initial round of programming, follow-up scores for each of the measures were not significantly different than were scores from students who had not previously received the program. Utilizing this strategy presented greater insight into the need for continued programming in order to gain the most benefit from the intervention, thus providing guidance in terms of program delivery and policies around how bullying prevention is conducted in schools. Overall, this was a rigorous evaluation with results that hold across different age groups and a number of different measures to provide a great deal of support for the use of social-emotional learning and skills-based programming, specifically through the format utilized in the JHS WW programs, in addressing bullying behaviour.

One of the limitations to this study can be found in the instruments used to collect data for the evaluation. Although differences in scores were found in many of the scales at post-test, there were instances in which only slight improvements were found. In most of these cases, students at both the intervention and comparison sites had reported very high scores on these items at pre-test. As a result, there was often little room for scores to increase substantially by the post-test period. As a result, the high evaluations students made of themselves may have resulted

in skewed statistics at the pre-test and a misrepresentation of the actual changes that occurred by post-test.

A second limitation is around the clarity of some of the items and the response scale used in the quantitative survey questions. In particular, the difficulty students experienced was with respect to negatively worded items, with students having problems understanding how to properly respond to these questions. When working with the younger students, I read each item out loud and provided clear explanations on how to respond to the questions, answering further questions if students were not clear on the instructions. While this strategy likely cleared up some of the confusion for these students, it is likely that older students faced similar problems but did not have the benefit of having someone read each item to them. As a result confusion around some of the items, for either of the two groups, may have impacted the accuracy of their responses. The use of negatively worded items in surveys for children has previously been criticized by Borgers, de Leeuw, and Hox (2000) who state that children between the ages of 8 and 11, as were most of the respondents in this study, are still developing the language skills required for properly understanding and responding to these questions. As a result, they recommend using only clear, unambiguous, and forward worded questions when collecting survey data from children in this age group.

Triangulation of data from multiple sources is often identified as a critical component for thorough program evaluations and presents a third limitation to this study. Triangulation refers to the use of various data sources, research, approaches, and formats for collecting and analyzing data. Such methods support increased accuracy in the interpretation of results and the credibility of the data being analyzed (Glanz, 2014). In this particular study, a mixed-method approach was used and data were analyzed and interpreted using a participatory framework that included the

major stakeholders. While the design of the evaluation did include a component in which data from teachers and other school staffs were solicited via an online survey, very few teachers opted to participate in this portion of the study. Although the feedback given through these surveys was consistent with the data from and suggestions made by student participants, increased participation from teachers would have offered stronger support for the findings that have been presented in this paper.

In line with this weakness is the number of measures used to evaluate the changes in youth who received either stream of the program. Because several measures were used, particularly with respect to the cognitive changes that were assessed, there is an increase in the likelihood that a Type 1 error could be made, that is there is an increase in the possibility that a false significant result may be found (Feise, 2002). In order to control for this possibility, a family-wise error of .007 was calculated, and many of the significant findings fall below this threshold, offering support for the likelihood that the findings were not the result of error due to the number of measures included.

Knowledge Translation

In order to ensure that the results of this study reach the key stakeholder groups, thus increasing the likelihood that the knowledge created through this evaluation will be put to use, several knowledge translation activities have been identified. The first major stakeholder in this evaluation is the John Howard Society of Waterloo-Wellington, with several levels of stakeholders being involved in this area. Feedback of the results and recommendations is critical for continued program success. As such, the program coordinator and executive director must be aware of the outcomes of the study. This area of knowledge translation has been built into the methodology used for this evaluation as both of these stakeholders have played an active role

through the participatory nature of the research. Results and recommendations have already been discussed with both parties although a potential action plan for inclusion of the recommendations is still needed and will be co-created by myself, the program coordinator, and the executive director. At this time, other stakeholders not included in this knowledge translation plan can be identified. Further, there are other staff members who run the JHS WW programming in other areas of the Waterloo Region. Feedback sessions with these staff members in which results, recommendations, and an action plan will be discussed. Finally, the broader organization should be aware of the final study results. Preliminary findings for the study have previously been presented via poster at one of the JHS WWs Annual General Meetings (AGM). A follow up presentation of the final results at the next AGM would allow for staff, board members, volunteers, and the general community to become familiarized with the outcomes of the study.

A second major stakeholder group that should be made aware of the results of this study is the school boards in which the program is being run. At this time, principals and staff contacts at the schools involved in this evaluation have already received an update on the preliminary findings, with each report specifically geared towards the outcomes found at their individual school. An updated report including the final findings of the study will be provided to each school and a fact sheet will be made available to these schools as well as other schools where the program has been used, or may be used in the future. This sheet will outline the successes of the program along with areas for support from within the schools which align with the recommendations outlined in this document. In addition to providing feedback to the schools, each of the larger school boards should be made aware of the impacts of the program. Various areas within the boards can be targeted including the Board of Directors, the Office for Equity and Inclusion, and the board mental health leads. Informing each of these groups within the

board may lead to the JHS WW anti-bullying program being identified as one of the board approved program choices for this region.

The next stakeholder group for which a knowledge translation strategy has been identified is the United Way Kitchener-Waterloo and area, the primary funding source for the JHS WW program. As is the case with the other stakeholder groups, preliminary findings have already been reported to the United Way K-W as part of the annual funding report required of all organizations who receive funding from the United Way. A follow up document describing the final results of the evaluation will be prepared and submitted to the United Way. In addition to this report, an additional strategy may be to request a meeting with key decision makers from the United Way to present the findings and recommendations in person.

Finally, results of this study should be communicated to the larger academic and bullying prevention community. It is proposed that papers be written describing the results of each stream of the program and on the importance of participatory research in creating a rigorous and meaningful evaluation. In addition to academic papers, abstracts will be submitted to conferences so that the results may be presented in various symposia. In keeping with the participatory nature of this evaluation overall, papers and presentations will be co-authored if at all possible.

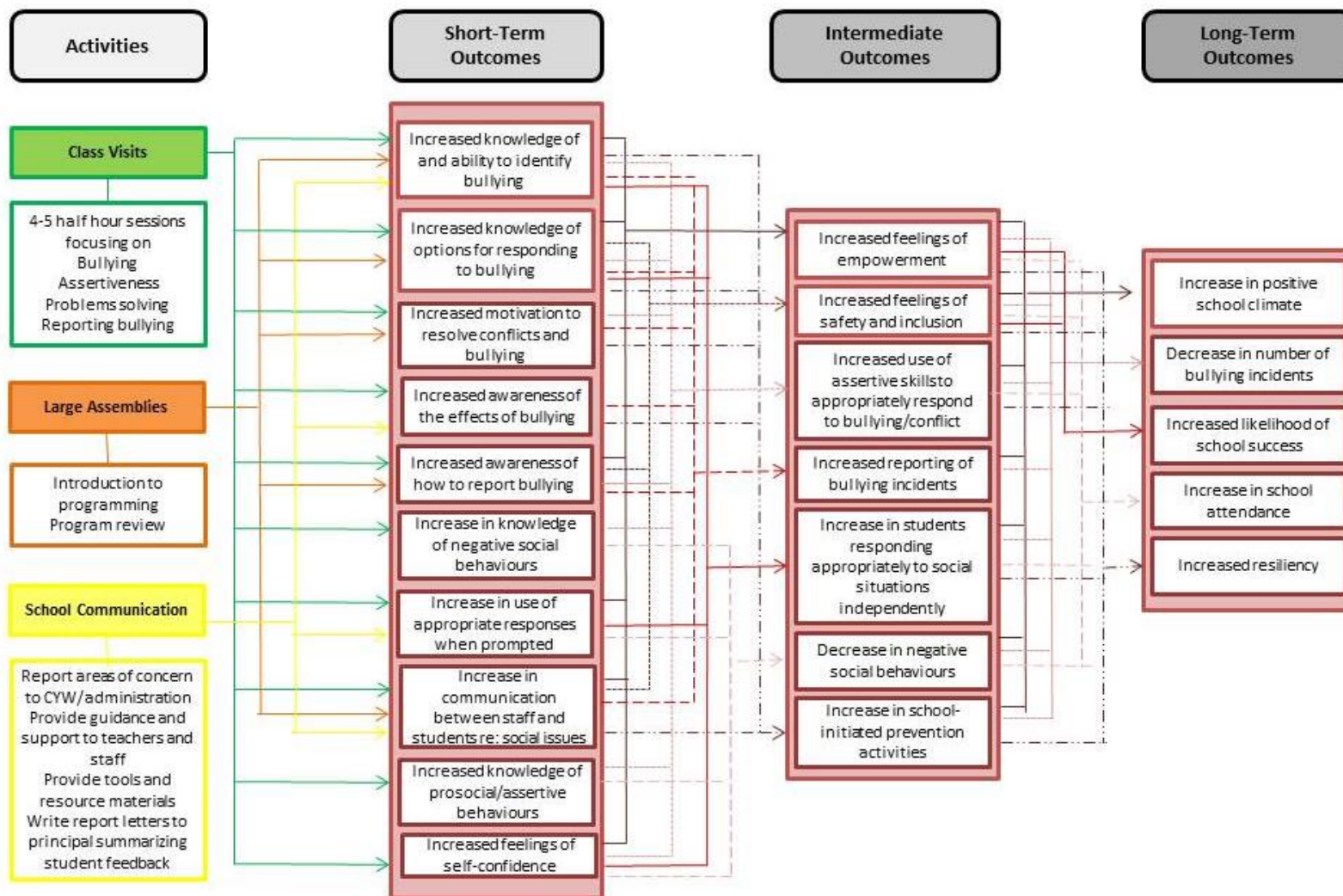
Conclusions

Overall, the data from this study indicate that the John Howard Society WW's bullying prevention program was successful in reducing bullying and aggressive behaviours, increasing the use of positive student interventions, and creating school climates where bullying others is not viewed as an acceptable behaviour. Targeting younger children and continuing to offer skills-based, social-emotional programming focused on changing the cognitive judgements which increase the use of aggressive behaviours throughout the elementary school years, make this

program a unique approach with promising impacts with respect to changing cognitive judgements and decreasing bullying behaviours. While some suggested areas for improvements do exist, these recommendations would only serve to support what is already a largely effective program, particularly for students in the junior grades. The skills-based approach used for both *One by One We Get Along* and *The Power Within* has clearly made a positive impact in the schools that have chosen to adopt this program as part of their bullying prevention strategy. Further, while many program results are negatively impacted due to issues around fidelity of implementation, which may vary across staff and schools (Bradshaw, 2015), the use of an external educator increases the likelihood that this program will continue to be successful across different school environments.

Figure 1

John Howard Society of Waterloo-Wellington: Bullying Prevention Program Logic Model



Appendix A

*Principal Consent Form***WILFRID LAURIER UNIVERSITY INFORMED CONSENT STATEMENT****Evaluating a skills-based approach to bullying prevention**

Rebecca Pister, PhD candidate, Department of Psychology, Wilfrid Laurier University

Dr. Mark Pancer, Professor, Department of Psychology, Wilfrid Laurier University

Your school is being invited to participate in a research study. The purpose of this study is to gain insight into the effectiveness of the John Howard Society's bullying prevention program currently being run in your school. We are looking to better understand how a skills-based approach to bullying prevention can help reduce bullying in schools. For more information on this program you can contact the John Howard Society at (519) 743-6071. I am a student in the Community Psychology program at Wilfrid Laurier. For school I am working with the John Howard Society to evaluate their anti-bullying program. This evaluation will serve as my dissertation for my doctoral program at Wilfrid Laurier University, to be completed by October, 2014.

INFORMATION

In order to collect the needed information, I will be asking 1200 Grade 3 and 6 students from 8 area schools (150 students per school) to complete a 30 minute survey which will look at issues such as the overall school sense of community felt by students, their understanding of bullying, and their ability to appropriately react to bullying situations. These surveys will be completed once in October, 2013, then again at the beginning of May, 2014. The survey taking place in May will include items about what students remember from the program and will take about 20 minutes longer to complete. I will also be asking all staff members to complete a short 30 minute survey asking about bullying and their experience and satisfaction with the program. Basic demographic information will be collected on these surveys. Additionally, a focus group will be conducted with Grade 7 and 8 students who have previously received the program. This will be audio recorded and will last approximately 1.5 hours and will address satisfaction with the program and what students remember from the program. Approximately 8 to 10 students from two schools with JHS programming will be invited to participate, for a total of 18 to 20 students. If we run this group at your school we will ask students in class if they would like to participate and will then randomly select enough participants for the group from those volunteers. All data collection times and dates will be selected with your school's specific needs in mind and you will be given the opportunity to select dates and times that you feel would work best.

RISKS

The nature of the questions asked on the survey may cause distress over past or current experiences of bullying or violence. These feelings are normal and should be temporary. In order to minimize this risk I will make myself available to students needing to talk after completing the survey and everyone will be provided with contact information for some local agencies that can help if they feel like talking to someone at a later date. Participants are able to skip questions or withdraw from participation in the study at any time and for any reason, without penalty. If needed, the school CYW or guidance counselor can be reached at:

BENEFITS

The information gained from these sessions will be used to add to the existing literature on the effectiveness of bullying prevention programs and will provide insight into what the program is doing well or what could be done to make it more effective. Additionally, participants will have the opportunity to discuss their experiences and/or share their thoughts about bullying and bullying prevention in a safe environment.

COMPENSATION

There is no compensation for participating in this study.

PARTICIPATION

Participation in this study is voluntary; students and staff may decline to participate without penalty and the loss of benefits to which they are otherwise entitled. As data is stored without identifiers, if a participant withdraws from the study after data has been collected their information may still be used in the reporting of results. Participants have the right to omit any question(s)/procedure(s) they choose.

CONFIDENTIALITY

In order to ensure confidentiality of all participants each student will be given a code number which will be written on their survey in place of their names. A master list of names and codes will be kept on my computer in a password protected file in order to match up names and numbers for the final testing phase, however all survey data will be kept separate from this list. All surveys will be kept in sealed envelopes in a locked filing cabinet and the contents will be inputted into data analysis software (SPSS) by me. Confidentiality for participants in the focus groups cannot be guaranteed as other students will be present during the groups, however all students will be reminded of the importance of confidentiality and ground rules will be set prior to beginning these groups.

Documents and all resulting analyses will be kept in a password protected file on a computer while all paper documents including consent forms and surveys will be kept in a locked filing cabinet in my office at Wilfrid Laurier University. All information will remain confidential with only me, my advisor Mark Pancer, and staff from the John Howard Society, including Jaime Sobotka and Dr. Dr Joan Nandlal, having access to the raw data and recordings. I will delete all of the files containing personal information by January 15, 2015 and delete and shred all remaining documents, data and tapes by January 15th, 2020. The final reporting of data will use only group information and not individual data.

FEEDBACK AND PUBLICATION

The results of this study will be used to complement data collected about the effectiveness of the program and changes that occur through its use. Results will be written up as part of a dissertation, which will be defended in fall of 2014, and may also be published in a journal article. Results will also be presented to John Howard staff and may be presented at professional and academic conferences. A copy of the thesis will be given to the John Howard Society and a summary of the results will be provided to the participating schools and will be available for viewing by February 1st, 2014. This summary will also be emailed to all participants.

CONTACT

If you have questions at any time about the study or the procedures, (or you or anyone at your school experience adverse effects as a result of participating in this study) you may contact me, Rebecca Pister, at pist0870@mylaurier.ca, and (519) 884-0710 ext 4252, or Dr. Mark Pancer at mpancer@wlu.ca or (519) 884-0710 ext 3149. This project has been reviewed and approved by the University Research Ethics Board, REB Approval Number (REB #3737). If participants feel that they have not been treated according to the descriptions in this form, or that their rights as a participant in research have been violated during the course of this project, you/they may contact Dr. Robert Basso, Chair, Wilfrid Laurier University Research Ethics Board, (519) 884-0710, extension 4994 or rbasso@wlu.ca. This project has been reviewed and approved by the Waterloo Region District School Board and the Waterloo Catholic District School Board.

CONSENT

I have read and understand the above information. I have received a copy of this form. I agree to have my school participate in this study.

Principal's signature _____ Date _____

Please include your email address so that I can send you a copy of the results of this study (optional).

Principal's email

Investigator's signature _____ Date _____

Please sign and return this part of the form by:

Appendix B

*Consent Form for Student Survey Participants***Evaluating a Skills-Based Approach to Bullying Prevention**

Bullying is a major issue faced by youth today and our school is doing what we can to try to address this issue before it becomes a problem. One way that we are doing that is by using the John Howard Society's Antibullying program which is designed to give students skills and information to help them learn to interact with one another in positive ways. In order to see how effective this program is, our school has agreed to participate in a research study that will help us to understand how we can best teach students about bullying so that we can help make our schools safe places. Our school will be using the program that is being evaluated either this year or next, so it is very important that as many of our students participate in this study as possible.

This study will have researchers from the John Howard Society come into our classrooms to have students fill in some survey questions before the program starts and then again in three months. The survey will take place during class time and we would like all students to participate so that we can get the best information possible. However, participation is voluntary and if you do NOT want your child to participate, please return this form indicating that they are not to fill in the survey. If you are interested in having your child participate, please return the consent form indicating that you give them permission to do so.

Thank you so much for taking the time to help us with this important research. The results will help to make schools safer places for all children.

WILFRID LAURIER UNIVERSITY
INFORMED CONSENT STATEMENT

Evaluating a skills-based approach to bullying prevention

Rebecca Pister, PhD Candidate, Department of Psychology, Wilfrid Laurier University

Dr. Mark Pancer, Professor, Department of Psychology, Wilfrid Laurier University

Your child is being invited to participate in a research study. The purpose of this study is to gain insight into the effectiveness of the John Howard Society's bullying prevention program currently being run in several schools in the Waterloo Region. We are looking to better understand how a skills-based approach to bullying prevention can help reduce bullying in schools. For more information on this program you can contact the John Howard Society at (519) 743-6071. I am a student in the Community Psychology program at Wilfrid Laurier. For school I am working with the John Howard Society to evaluate their anti-bullying program. This evaluation will serve as my dissertation for my doctoral program at Wilfrid Laurier University, to be completed by October, 2014.

INFORMATION

In order to collect the needed information, I will be asking around 1600 Grade 3 and 6 students from 8 area schools (150 students per school) to complete a 20 to 30 minute survey which will look at issues such as the overall school sense of community felt by students, their understanding of bullying, and their ability to appropriately react to bullying situations. This survey will be completed once in October, 2013, then again at the beginning of May, 2014. If the program was in your child's school the second survey will include questions about what he or she remembers from the program and what he or she liked or did not like about it. This section should take an extra 20 minutes to complete. Basic demographic information will be collected on all surveys.

RISKS

The nature of the questions asked on the survey may cause distress over past or current experiences of bullying or violence. These feelings are normal and should be temporary. In order to minimize this risk I will be available for students needing to talk after completing the survey and participants will be provided with contact information for some local agencies that can help if they feel like talking to someone at a later date. Participants are able to skip questions or withdraw from participation in the study at any time and for any reason, without penalty. If needed, the school CYW or guidance counselor can be reached at:

CONFIDENTIALITY

In order to ensure confidentiality students will be given a code number which will be written on their survey in place of their names. A master list of names and codes will be kept on my computer in a password protected file in order to match up names and numbers for the final testing phase, however all survey data will be kept separate from this list. All surveys will be kept in sealed envelopes in a locked filing cabinet and the contents will be inputted into data analysis software (SPSS) by me. Documents and all resulting analyses will be kept in a password protected file on a computer while all paper documents including consent forms and surveys will be kept in a locked filing cabinet in my office at Wilfrid Laurier University. All information will remain confidential with only me, my advisor Mark Pancer, and staff from the John Howard Society, including Jaime Sobotka and Dr Joan Nandlal, having access to the raw data. I will

delete all of the files containing personal information by January 15, 2015 and delete and shred all remaining documents, data and tapes by January 15th, 2020. The final reporting of data will use only group information and not individual data.

BENEFITS

The information gained from these sessions will be used to add to the existing literature on the effectiveness of bullying prevention programs and will provide insight into what the program is doing well or what could be done to make it more effective. There are no direct benefits to participants.

COMPENSATION

There is no compensation for participating in this study.

PARTICIPATION

Participation in this study is voluntary; students and staff may decline to participate without penalty and the loss of benefits to which they are otherwise entitled. As data is stored without identifying information, if they withdraw from the study before completing the survey their responses may still be used in the reporting of results. Participants have the right to omit any question(s)/procedure(s) they choose.

FEEDBACK AND PUBLICATION

The results of this study will be used to complement data collected about the effectiveness of the program and changes that occur through its use. Results will be written up as part of a dissertation, which will be defended in fall of 2014, and may also be published in a journal article. Results will also be presented to John Howard staff and may be presented at professional and academic conferences. A copy of the thesis will be given to the John Howard Society and a summary of the results will be provided to the participating schools and will be available for viewing by February 1st, 2014. This summary will also be emailed to all participants.

CONTACT

If you have questions at any time about the study or the procedures, (or you or anyone at your school experience adverse effects as a result of participating in this study) you may contact me, Rebecca Pister, at pist0870@mylaurier.ca, and (519) 884-0710 ext 4252, or Dr. Mark Pancer at mpancer@wlu.ca or (519) 884-0710 ext 3149. This project has been reviewed and approved by the University Research Ethics Board, REB Approval Number (REB #3737). If participants feel that they have not been treated according to the descriptions in this form, or that their rights as a participant in research have been violated during the course of this project, you/they may contact Dr. Robert Basso, Chair, Wilfrid Laurier University Research Ethics Board, (519) 884-0710, extension 4994 or rbasso@wlu.ca. This project has been reviewed and approved by the Waterloo Region District School Board and the Waterloo Catholic District School Board.

CONSENT

I have read and understand the above information. I have received a copy of this form.

YES, I give permission for my son/daughter's answers to be used in this study. _____

I DO NOT give permission for my son/daughter to complete this survey. _____

Student Name: _____

Parent/guardian/proxy signature _____ Date _____

Please include your email address so that I can send you a copy of the results of this study (optional).

Parent's email

Investigator's signature _____ Date _____

Please sign and return this part of the form

Appendix C

*Student Quantitative Measures***What is Bullying?**

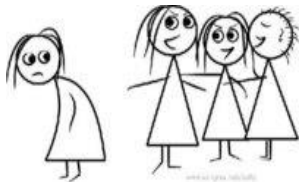
There are many different kinds of bullying. Generally, bullying is behaviours that are **repeated**, **intentional**, and **hurtful**. If all three words can be checked off, it might be bullying. Here is a list of the major types with some examples to help you out.

PHYSICAL

- hitting, pushing, shoving, slapping, kicking, spitting at, or beating others up
- damaging or stealing someone's property

**THREATS AND INTIMIDATION**

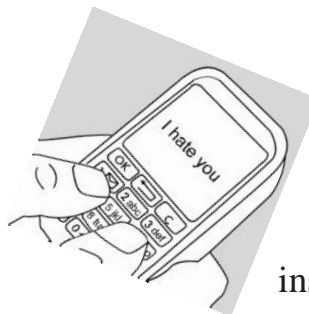
- using fear to try and manipulate or control someone else's actions

**SOCIAL**

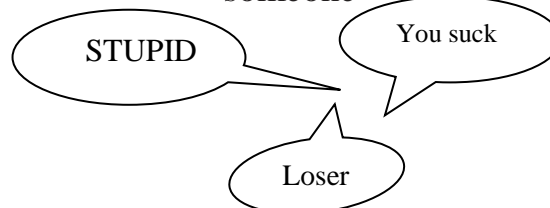
- excluding others from "the group" or from an activity
- gossiping or spreading rumours
- setting others up to look foolish
- making sure others don't associate with someone

CYBER

- sending e-mails, text messages or pictures to threaten someone, hurt their feelings, embarrass them, or make them look bad, or spread rumours or reveal secrets about them
- cyberstalking
- creating/joining hate groups

**VERBALLY**

- name-calling, hurtful teasing, insulting, or humiliating someone



This survey is going to help us get to know more about bullying in your school and will take about **30 minutes** to complete. Please **do not** put your name on the survey. Your answers are **confidential**, so please answer the questions **HONESTLY**.

When answering please fill in the circle **completely**.

Example:

	Almost Never	Not Very Often	Half the Time	Very Often	Almost Always
1. Unicorns are real	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
2. Chocolate is the best	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
3. Weekends are awesome	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please start by telling us a little bit about you:

1. Are you: ___ Male ___ Female
2. What grade are you in? _____

3. Stopping bullying (Empathy and Motivation to Stop Bullying Subscales)

Think about how you feel about bullying. Fill in the circle that shows how you feel.

	Almost Never	Not Very Often	Sometime Yes and Sometimes No	Very Often	Almost Always
1. It hurts people's feelings when they are being bullied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I feel badly for students who are being bullied by others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. It bothers me when I see other students being hurt or upset by kids at school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. When another student is being bullied I want to help them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Being bullied can make people feel angry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I think it is ok to bully others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. It is not up to me to help other students who are being bullied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Being bullied can make people feel badly about themselves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I feel like I have the power to stop bullying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I want to make sure bullying doesn't happen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. When people are bullied it can hurt them for a long time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How do you feel about yourself? (Self-Esteem and Resiliency Subscales)

Think about your opinion of yourself since this school year started. How often do you feel like this:

	Almost Never	Not Very Often	Sometimes Yes and Sometimes No	Very Often	Almost Always
1. I am just as smart as other students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I am bad at a lot of things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. When I do something wrong it upsets me for a long time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I am able to do things as well as most other students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I do not have much to be proud of	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. When other students make fun of me it hurts my feelings for a long time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. There are things that I am really good at	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. There are lots of good things about me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I like myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I worry about what other students think of me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Other students like me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I fit in at school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. When I feel upset I try not to let it bother me for a long time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. My opinion matters to other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. What happens at your school? (School Climate)

Fill in the circle that shows how often you see the following things happen in your school

	Almost Never	Not Very Often	Half the Time	Very Often	Almost Always
1. Students treat other students with respect	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Students show respect for school property (desks, walls, bathrooms, buses etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I feel comfortable talking to a teacher when I am upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Students are disrespectful towards the personal property of others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Students help each other, even if they are not friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. When students do something hurtful to me they try to make up for it (apologize or do something nice etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Older students are unkind to younger students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Students are disrespectful toward teachers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Students try to work through their differences without fighting, insults, or threats	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Students pick on other students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. When students see another student being picked on they try to stop it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Students make negative, hurtful comments toward or about each other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Teachers in my school try to stop bullying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Have you seen **someone else** being bullied at this school in the last two months?

____YES ____NO

If **no** please move to the next question

If **yes** take a moment to think of the times you have seen **SOMEONE ELSE BEING BULLIED AT THIS SCHOOL**. How often did you do the following?

(Bystander Responses)

	Never	Almost Never	Half the Time	Almost Always	Always
1. Ignore it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Tell an adult at home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Tell another adult outside of school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Tell your teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Tell your principal or vice-principal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Tell another adult at school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Defend the target – tell the person bullying to stop etc	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Help the person being bullied – see if the target is ok, talk to the target etc	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Stand and watch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Tell the person to stop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Join in the bullying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Get an adult at school to help stop it while it's happening	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Wait until later and get back at the person who was bullying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Have **you** been bullied at school in the last two months? ____YES ____NO

If **no** move to the next question.

If yes, take a moment to think of the times **YOU HAVE BEEN BULLIED AT SCHOOL**.
How often did you do the following:

(Target Responses)

	Never	Almost Never	Half the Time	Almost Always	Always
1. Walk away without responding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Tell an adult at home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Tell another adult outside of school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Tell your teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Tell your principal or vice-principal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Tell another adult at school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Tell another student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Fight back – yell, swear, hit, push etc	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Tell the person to stop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Joke about it to pretend it didn't bother you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Wait until later and get back at the person who was bullying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I didn't do anything	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please pay close attention. The answers for the rest of the questions are all a bit different!

7. Right or wrong... (Identifying Behaviours - Positive and Negative Behaviour Subscales)

Think about the following actions and tell me if **YOU THINK** they are right or wrong. Mark whether **YOU THINK** the actions are really wrong, sort of wrong, sort of OK or perfectly OK.

<i>Do you think it is wrong or ok to:</i>	Really Wrong	Sort of Wrong	Sort of Ok	Perfectly Ok
1. Tease students in front of others in order to upset that person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Spread rumors about other students behind their backs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Tell an adult when you think a fight might happen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Push, shove, or pick fights with other students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Encourage students to fight each other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Tell an adult when students are spreading rumors about other students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Ignore it when other students are being pushed around	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Send hurtful, hateful and humiliating messages to or about other students using the Internet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Go tell an adult when another student is getting beaten up.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Tell an adult that a friend is being bullied after that friend has told you not to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. How easy or hard? (Self-Efficacy for Defending Behaviours)

Think about how you would feel if you saw someone being bullied. Would it be hard for you to do something or easy? Mark how hard or easy it would be for each of these situations.

	Very Hard for Me	Sort of Hard for Me	Sort of Easy for Me	Very Easy for Me
1. Trying to defend someone who is being bullied by someone I don't know well would be	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Trying to defend someone who is being bullied by a classmate would be	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Trying to defend someone who is being bullied by a friend of mine would be	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Telling an adult at school if a student is being bullied would be	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Telling an adult at home if a student at school is being bullied would be	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Getting help for another student while they are being bullied would be	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. If I don't know the person who is being bullied helping them would be	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. If my classmate is being bullied helping them would be	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. If my friend is being bullied helping them would be	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. What is your experience? (Aggressor Behaviours/Responses)

a. In the past **two months**, how often have you:

	It Hasn't Happened	It Happened Once or Twice	Two or Three Times a Month	About Once a Week	Several Times a Week
1. Called another student mean names	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Made fun of another student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Pushed another student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Teased another student to be mean	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Left another student out of things on purpose	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Hit another student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Sent another student a mean email or text message	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Taken something that belonged to another student to upset them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Made fun of another student online by posting a message, picture or something else about them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Spread a rumor about another student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Made another student feel like you wouldn't be their friend anymore unless they did what you wanted them to do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Tried to make another student feel unsafe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

b. In the past **two months**, how often has **another student**: (Target Behaviours/Responses)

	It Hasn't Happened	It Happened Once or Twice	Two or Three Times a Month	About Once a Week	Several Times a Week
1. Called you mean names	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Made fun of you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Pushed you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Teased you and hurt your feelings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Left you out of things on purpose	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Hit you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Sent you a mean email or text message	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Taken something that belonged to you to upset you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Made fun of you online by posting a message, picture or something else about you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Spread a rumor about you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Made you feel like they wouldn't be your friend anymore unless you did what they wanted you to do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Made you feel unsafe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix D

Student Qualitative Questionnaire

Please think back to the John Howard Society's Bullying Prevention Program and answer the following questions.

12. What did you like best about the program?

13. What did you like least about the program?

14. What are three things that you remember about the program?

1.

2.

3.

15. Have you used any of the skills you learned in the program?

Yes___ No___ I don't know ___

If you have, tell me about a time you used these skills:

16. What ideas do you have about how we could make the program even better?

Appendix E

*Staff Survey***WILFRID LAURIER UNIVERSITY****Evaluating a skills-based approach to bullying prevention****Rebecca Pister, PhD candidate, Department of Psychology, Wilfrid Laurier University****Dr. Mark Pancer, Professor, Department of Psychology, Wilfrid Laurier University****REB Approval #3737**

This survey has been designed to help us get to know more about bullying in your school and will take about **10 minutes** to complete. Please **do not** put your name on the survey. Your answers are **confidential**, so please answer the questions **HONESTLY**.

What is your Primary Position?

___ Principal ___ Vice Principal ___ Teacher
___ Counselor/psychologist ___ Child and Youth Worker ___ Support Staff
___ Other Professional (e.g., occupational therapist, speech therapist) ___ Volunteer

If you are a teacher, grade(s) Taught: _____

Subject(s) Taught: _____

Gender: _____

The following questions have been developed to allow you an opportunity to provide some feedback about the program itself. Take a moment to reflect on your experience with the John Howard Society's Anti-bullying program and answer the following questions as they apply to you.

1) Take a moment to reflect on your experience with the John Howard Society's Anti-bullying Program. How many of the program sessions did you attend with your class?

- ☐ None
- ☐ One
- ☐ Two
- ☐ Three
- ☐ Four
- ☐ Five
- ☐ Not Applicable

2) Please take some time to rate the program on the following items:

	Unacceptable	Poor	Adequate	Good	Excellent	N/A
1. Communicating on the student's level						
2. Providing meaningful connection with students						
3. Meeting the educational needs of students						
4. Presenting the material in an engaging way						
5. Providing material, thoughts and or information that provokes classroom discussion						
6. Material being presented in an age-appropriate manner						
7. Overall, how do you rate the quality of this program						

Please provide comments or specific examples related to the items above

3) How likely are you to encourage other schools to use this program?

Very Unlikely Unlikely Somewhat Likely Likely Certain N/A

4) How willing would you be to have this program in your class again?

Very Unwilling Unwilling Somewhat Willing Willing Very Willing N/A

Please take some time to answer the following questions about your experience with the program:

- 5) What are some of the changes you have seen because of the program? For example, ability to identify bullying, ability to respond to bullying, changes in the culture of the school etc.**

In your students

In yourself

In your school

- 6) What are some of the biggest benefits of the program?**

For your students

For yourself

For your school

7) What ideas do you have about how the program could be improved?

8) What other thoughts or opinions do you have about the program?

9) If you would like to be contacted for a follow up interview, please leave your name and phone number below.

Appendix F

Percentage of Bystanders Engaging in Specific Defending Behaviours

Data indicates the percentage of students who reported using these behaviours at least half of the time they saw bullying occur							
	Primary				Junior		
	Site	Pre-test I - n=40 C - n=30	Post-test I – n=22 C – n=34	Difference	Pre-test I – n=45 C- n=48	Post-test I – n=21 C – n=50	Difference
Assist							
Help the person being bullied – see if the target is ok, talk to the target, etc	I	82.1 (n=32)	85.7 (n=18)	+3.6	93.3 (n=42)	85.7 (n=18)	-7.6
	C	83.3 (n=25)	76.5 (n=26)	-6.8	91.6 (n=44)	75.5 (n=37)	-16.1
Get an adult at school to help stop it while it's happening	I	64.1 (n=25)	71.4 (n=15)	+7.3	62.2 (n=28)	66.7 (n=14)	+4.5
	C	66.7 (n=20)	64.7 (n=22)	-2.0	62.5 (n=30)	50.0 (n=25)	-12.5
Inform							
Tell an adult at home	I	67.5 (n=27)	72.7 (n=16)	+5.2	55.6 (n=25)	61.9 (n=13)	+6.3
	C	76.6 (n=23)	76.4 (n=26)	-0.2	58.3 (n=28)	36.8 (n=18)	-21.5
Tell another adult outside of school	I	57.5 (n=23)	59.1 (n=13)	+1.6	42.2 (n=19)	42.9 (n=9)	+0.7
	C	67.9 (n=19)	47.0 (n=16)	-20.9	46.8 (n=22)	22.0 (n=11)	-24.8
Tell your teacher	I	84.6 (n=34)	63.6 (n=14)	-21.0	62.2 (n=28)	71.4 (n=15)	+9.2
	C	76.7 (n=23)	73.6 (n=25)	-3.1	64.6 (n=31)	56.0 (n=28)	-8.6
Tell your principal or vice-principal	I	55.0 (n=22)	52.4 (n=11)	-2.6	40.9 (n=18)	42.9 (n=9)	+2.0
	C	55.2 (n=16)	49.9 (n=17)	-2.8	43.8 (n=21)	24.0 (n=12)	-19.8
Tell another adult at school	I	52.5 (n=21)	57.1 (n=12)	+4.6	37.8 (n=17)	66.7 (n=14)	+28.9
	C	56.7 (n=17)	58.9 (n=20)	+2.2	54.3 (n=26)	32.6 (n=16)	-21.7
Defend							
Defend the target – tell the person bullying to stop etc	I	75.0 (n=30)	90.9 (n=20)	+15.9	84.4 (n=38)	76.2 (n=16)	-8.2
	C	75.9 (n=22)	61.7 (n=21)	-14.2	79.2 (n=38)	76.0 (n=38)	-3.2
Tell the person to stop	I	70.0 (n=28)	68.2 (n=15)	-1.8	81.8 (n=36)	71.4 (n=15)	-10.4
	C	72.4 (n=21)	79.5 (n=27)	+7.1	85.5 (n=41)	70.0 (n=35)	-15.5

Negative Interventions							
Ignore it	I	50.0 (n=20)	31.8 (n=7)	-18.2	51.1 (n=23)	33.3 n=(7)	-17.8
	C	40.0 (n=12)	44.1 (n=15)	+4.1	39.6 (n=19)	52.0 (n=26)	+12.4
Stand and watch	I	35.0 (n=14)	13.6 (n=3)	-21.4	26.7 (n=12)	14.3 (n=3)	-12.4
	C	36.6 (n=11)	44.1 (n=15)	+7.5	29.2 (n=14)	30.0 (n=15)	+0.8
Join in the bullying	I	10.0 (n=4)	9.1 (n=2)	-0.9	4.4 (n=2)	9.5 (n=2)	+5.1
	C	16.7 (n=5)	5.8 (n=2)	-10.9	8.4 (n=4)	4.0 (n=2)	-4.4
Wait until later and get back at the person who was bullying	I	25.0 (n=10)	13.6 (n=3)	-11.4	28.9 (n=13)	19.0 (n=4)	-9.9
	C	23.3 (n=7)	17.6 (n=6)	-5.7	22.9 (n=11)	22.0 (n=11)	-0.9

Appendix G

Percentage of Targets Engaging in Specific Defending Behaviours

Data indicates the percentage of students who reported using these behaviours at least half of the time they saw bullying occur							
		Primary			Junior		
	Site	Pre-test I - n=40 C - n=30	Post-test I - n=22 C - n=34	Difference	Pre-test I - n=45 C - n=48	Post-test I - n=21 C - n=50	Difference
Inform							
Tell an adult at home	I	79.3 (23)	80.0 (12)	+0.7	72.2 (26)	71.4 (10)	-0.8
	C	79.3 (23)	73.4 (22)	-5.9	62.1 (23)	53.5 (23)	-8.6
Tell another adult outside of school	I	71.4 (20)	46.7 (7)	-24.7	36.1 (13)	35.7 (5)	-0.4
	C	59.2 (16)	56.6 (17)	-2.6	21.6 (8)	27.9 (12)	+6.3
Tell your teacher	I	69.0 (20)	73.3 (11)	+4.3	61.1 (22)	71.4 (10)	+10.3
	C	55.1 (16)	66.7 (20)	+15.3	56.7 (21)	37.2 (16)	-19.5
Tell your principal or vice-principal	I	27.6 (8)	42.9 (6)	+15.3	19.4 (7)	28.6 (4)	+9.2
	C	41.4 (12)	36.6 (11)	-4.8	35.1 (13)	20.9 (9)	-14.2
Tell another adult at school	I	55.2 (16)	40.0 (6)	-15.2	30.6 (11)	50.0 (7)	+19.4
	C	37.9 (11)	56.7 (17)	+18.8	24.3 (9)	19.5 (8)	-4.8
Tell another student	I	71.4 (20)	80 (12)	+8.6	80.6 (29)	71.4 (10)	-9.2
	C	65.5 (19)	76.6 (23)	+11.1	67.5 (25)	72.1 (31)	+4.6
Defend Self							
Walk away without responding	I	65.5 (19)	66.7 (10)	+1.2	63.9 (23)	64.3 (9)	+0.4
	C	66.7 (19)	51.3 (16)	-15.4	64.8 (24)	60.5 (26)	-4.3
Tell the person to stop	I	82.8 (24)	86.7 (13)	+3.9	77.8 (28)	85.7 (12)	+7.9
	C	72.3 (21)	82.7 (24)	+10.2	67.5 (25)	69.0 (29)	+1.5
Negative Interventions							
Fight back – yell, swear, hit punch, etc	I	20.7 (6)	13.3 (2)	-7.4	41.7 (15)	21.4 (3)	-20.3
	C	17.2 (5)	13.4 (4)	-3.8	35.1 (13)	46.5 (20)	+11.4
Joke about it and pretend it didn't bother you	I	48.3 (14)	20 (3)	-28.3	61.1 (22)	42.9 (6)	-18.2
	C	27.5 (8)	26.6 (8)	-0.9	48.5 (18)	50.0 (21)	+1.4

Wait until later and get back at the person who was bullying	I	20.7 (6)	20.0 (3)	-0.7	25.0 (9)	28.6 (4)	+3.6
	C	3.4 (1)	20.0 (6)	+16.6	24.3 (9)	23.3 (10)	-1.0
I didn't do anything	I	37.9 (11)	46.7 (7)	+8.8	42.9 (15)	35.7 (5)	-7.2
	C	48.2 (14)	34.4 (10)	-13.8	37.8 (14)	44.2 (19)	-6.4

Appendix H

Percentage of Aggressors Engaging in Specific Acts of Aggression

Data indicates the percentage of students who reported using these behaviours at least once or twice in the two months prior to completing the survey							
	Primary				Junior		
	Site	Pre-test I - n=85 C - n=83	Post-test I - n=77 C - n=78	Difference	Pre-test I - n=65 C - n=108	Post-test I - n=61 C - n=102	Difference
Cyber							
Sent another student a mean email or text message	I	2.4 (2)	2.6 (2)	+0.2	9.2 (6)	6.6 (4)	-2.6
	C	2.4 (2)	3.8 (3)	+1.4	16.7 (18)	14.7 (15)	-2.0
Made fun of another student online by posting a message, picture or something else about them	I	0.0 (0)	0.0 (0)	0.0	4.6 (3)	4.9 (3)	-0.3
	C	0.0 (0)	1.3 (1)	+1.3	13.9 (15)	9.8 (10)	-4.1
Verbal							
Called another student mean names	I	25.9 (22)	16.9 (13)	-9.0	46.2 (30)	41.0 (25)	-5.2
	C	31.3 (26)	35.9 (28)	+4.6	59.6 (65)	58.5 (60)	-1.1
Made fun of another student	I	17.6 (15)	9.1 (7)	-8.5	32.8 (21)	29.5 (18)	-3.3
	C	25.3 (21)	28.2 (22)	+2.9	40.4 (44)	49.0 (50)	+8.6
Teased another student to be mean	I	11.8 (10)	6.5 (5)	-5.3	15.4 (10)	16.4 (10)	+1.0
	C	12.0 (10)	10.32 (8)	-1.7	23.4 (25)	28.4 (29)	+5.0
Social							
Left another student out of things on purpose	I	14.1 (12)	11.7 (9)	-2.4	30.8 (20)	27.9 (17)	-2.9
	C	32.5 (27)	25.6 (20)	-6.9	23.8 (25)	41.2 (42)	+17.4
Spread a rumor about another student	I	7.1 (6)	6.5 (5)	-0.6	18.5 (12)	19.8 (12)	+1.3
	C	14.5 (12)	20.5 (16)	+6.0	13.9 (15)	14.7 (15)	+0.8
Physical							
Pushed another student	I	25.9 (22)	16.9 (13)	-9.0	29.2 (19)	29.5 (18)	+0.3
	C	30.1 (25)	38.5 (30)	+8.4	42.6 (46)	49.0 (50)	+6.4

Hit another student	I	16.5 (14)	13.0 (10)	-3.5	18.5 (12)	27.9 (17)	+9.4
	C	18.1 (15)	21.7 (17)	+3.6	31.8 (31)	30.4 (31)	-1.4
Taken something that belonged to another student to upset them	I	9.4 (8)	6.5 (5)	-2.9	15.4 (10)	14.8 (9)	-0.6
	C	8.4 (7)	10.3 (8)	+1.9	15.7 (17)	18.6 (19)	+2.9
Threats and Intimidation							
Made another student feel like you wouldn't be their friend anymore unless they did what you wanted them to do	I	12.9 (11)	3.9 (3)	-9.0	18.5 (12)	9.8 (6)	-8.7
	C	21.7 (18)	16.7 (13)	-5.0	10.3 (7)	15.8 (16)	+5.5
Tried to make another student feel unsafe	I	2.4 (2)	3.9 (3)	+1.5	10.8 (7)	4.9 (3)	-5.9
	C	8.4 (7)	10.3 (8)	+1.9	10.3 (11)	5.9 (6)	-4.4

Appendix I

Percentage of Targets Experiencing Specific Acts of Aggression

Data indicates the percentage of students who reported using these behaviours at least once or twice in the two months prior to completing the survey							
		Primary			Junior		
	Site	Pre-test I - n=84 C - n=81	Post-test I - n=76 C - n=79	Difference	Pre-test I - n=66 C - n=108	Post-test I - n=61 C - n=102	Difference
Cyber							
Sent you a mean email or text message	I	8.3 (7)	6.6 (5)	-1.7	12.1 (8)	13.1 (8)	+1.0
	C	9.9 (8)	7.6 (6)	-2.3	16.8 (18)	19.0 (19)	+2.2
Made fun of you online by posting a message, picture or something else about you	I	6.0 (5)	3.9 (3)	-2.1	10.6 (7)	3.3 (2)	-7.3
	C	6.2 (5)	7.6 (6)	+1.4	13.9 (15)	17.8 (18)	+3.9
Verbal							
Called you mean names	I	61.9 (52)	36.8 (28)	-25.1	59.1 (39)	59.0 (36)	-0.1
	C	56.8 (46)	62.0 (49)	+5.2	63.9 (69)	66.3 (67)	+2.4
Made fun of you	I	46.4 (39)	31.6 (24)	-14.8	62.1 (41)	47.5 (29)	-14.6
	C	54.3 (44)	53.2 (42)	-1.1	54.6 (59)	59.4 (60)	+4.8
Teased you and hurt your feelings	I	40.5 (34)	43.4 (33)	+2.9	42.4 (28)	39.3 (24)	-3.1
	C	51.9 (42)	50.0 (39)	-1.9	38.7 (41)	52.0 (52)	+13.3
Social							
Left you out of things on purpose	I	51.2 (43)	39.5 (30)	-11.7	42.4 (28)	37.7 (23)	-4.7
	C	52.5 (42)	46.8 (37)	-5.7	43.0 (46)	45.5 (46)	+2.5
Spread a rumor about you	I	20.5 (17)	23.7 (18)	+3.2	42.4 (28)	32.8 (20)	-9.6
	C	35.4 (28)	39.2 (31)	+3.8	34.3 (37)	37.6 (38)	+3.3
Physical							
Pushed you	I	63.1 (53)	36.8 (28)	-26.3	48.5 (32)	36.1 (22)	-12.4
	C	56.8 (46)	53.2 (42)	-3.6	50.0 (54)	58.4 (59)	+8.4
Hit you	I	39.3 (33)	30.3 (23)	-9.0	28.8 (19)	32.8 (20)	+4.0
	C	37.0 (30)	30.4 (24)	-6.6	37.0 (40)	40.0 (40)	+3.0
Taken something that belonged to you to upset	I	38.1 (32)	34.2 (26)	-3.9	30.3 (20)	23.0 (14)	-7.3

you	C	16.3 (13)	40.5 (32)	+24.2	23.4 (25)	37.6 (38)	+14.2
Threats and Intimidation							
Made you feel like they wouldn't be your friend anymore unless you did what you wanted you to do	I	45.2 (38)	34.2 (26)	-11.0	34.8 (23)	23.0 (14)	-11.8
	C	51.9 (42)	40.5 (32)	-11.4	29.6 (32)	35.6 (36)	+6.0
Tried to make you feel unsafe	I	33.3 (28)	27.6 (21)	-5.7	30.3 (20)	23.0 (14)	-7.3
	C	45.7 (37)	39.2 (31)	-6.5	34.3 (37)	29.7 (30)	-4.6

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